



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

99-PRO-203

Mr. R. D. Hanson, President
Fluor Daniel Hanford, Inc.
Richland, Washington 99352

Dear Mr. Hanson:

CONTRACT NO. DE-AC06-96RL13200 – FEE DETERMINATION FOR THE PERIOD OF OCTOBER 1, 1997, THROUGH SEPTEMBER 30, 1998

This letter transmits the Fiscal Year (FY) 1998 fee determination for Fluor Daniel Hanford, Inc. (FDH) under the Project Hanford Management Contract (PHMC). My determination is based on the evaluations of 101 “Critical Few” objective performance incentives, the U.S. Department of Energy, Richland Operations Office (RL) Fee Administration Board Report for the more subjective “MEGA Incentive” detailed in the Performance Expectation Plan, and the fact that FDH met the minimum requirements as specified in contract clause H.47. As the Fee Determining Official for RL, I am pleased to inform you that FDH has earned \$32,187,772 out of the available \$44,600,000. Performance in FY 1998 showed significant improvement over the first year of the PHMC and reflects FDH’s diligence in meeting the challenges identified in its self-assessment at the close of FY 1997.

Notable elements of performance under the “Critical Few” incentives for the PHMC include:

- Advanced Reactor Transition: All incentives established for this program were met and 100% of the available fee was earned.
- Waste Management Program: All incentives established for this program were met. Most of the stretch goals associated with WM 3.1.1, Utilize WRAP Capabilities, were met and resulted in 94% of the available fee for this program being earned.
- Tank Waste Remediation System: All incentives, including stretch goals, were achieved and 100% of the available fee has been earned. This includes performance incentive TWR 1.2.2, Modification to the Basis for Interim Operations and Technical Safety Requirements which is conditionally approved based upon current information, subject to RL final validation in mid-January 1999.
- Facilities Stabilization Program: 90% of the available fee for this program was earned.

A detailed listing of the individual performance expectations is attached that shows whether they were or were not met.

The technical requirements of performance expectations SID 1.1.1, Software Modules for Finance and Supply Management Systems (HANDI), and SID 1.2.1, Complete Computer Assessments (Y2K Project), were met. However, the cost variance threshold was exceeded by .56% which would require disapproval of these two expectations. After careful consideration of the benefits achieved by completion of these two expectations and the amount of the cost variance, I have determined that all fee associated with these two incentives has been earned.

No fee associated with the Spent Nuclear Fuel Project will be paid. While positive performance was seen in several areas, both cost and schedule variances significantly exceeded the established thresholds.

FDH performance under the Performance Expectation Plan found in the MEGA Incentive was rated "Excellent" for the year with a trend of solid improvement in most major areas of importance by fiscal yearend. This excellent rating results in earnings of 82% of the fee available for the MEGA Incentive, or \$5,485,800. This strong finish in FY 1998 establishes a good foundation upon which improvements can be made in FY 1999.

Overall, I am very pleased with the progress attained this past fiscal year. We look forward to FDH's continued improvement in FY 1999. If you have any questions, please contact me, or your staff may contact Sally Sieracki, Procurement Services Division, on (509) 376-8948.

Sincerely,

PRO:SAS

Lloyd L. Piper
Acting Manager

Attachments:

1. Fee Determination for October 1, 1997, through September 30, 1998
2. RL Fee Administration Board Report

CONTRACT DE-AC06-96RL13200
 FLUOR DANIEL HANFORD, INC.
 FEE DETERMINATION FOR THE PERIOD
 OCTOBER 1, 1997 THROUGH SEPTEMBER 30, 1998

Critical Few Performance Incentives Met:

AMT1.1.1	Create 500 Local Non-Hanford Jobs
ART1.1.1	Na and Nak Disposition in Nuclear Energy Legacies Program
ART1.1.2	Cold Test Phase of Open Test Assembly Shear Project and Conceptual Design of Solid Waste Cask Upgrade
ART1.1.3	Maintain Health Facility Including Rotary Head Mounted Component Testing Program
ART1.1.4	Increase Safety and Radiological Control Awareness
CFO1.1.1	No Funds Ceilings Exceeded
CFO2.1.1	Performance Measurement and Cost Charging Practices
CFO3.1.1	Indirect Funding Activities <= 100% of Baseline
CFO4.1.1	Data Consistency
CFO5.1.1	Socioeconomic and Fixed-Price Subcontracting Goals
FS1.1.1	B Plant Deactivation
FS1.1.2	Construction of Project W-059
FS2.1.1	Construction of WESF Ion Exchange System
FS2.1.2	Construction of WESF Low Level Liquid Waste System
FS2.1.3	Decouple WESF from B Plant, Declare WESF Self-Sufficient
FS3.1.1	Surveillance/Maintenance of Accelerated Deactivation Facilities; Deactivate One Facility
FS4.1.1	"Gap Analysis" and Implementation Plan for Integrated Safety Management System (ISMS) for WESF
FS4.1.2	"Gap Analysis" and Implementation Plan for ISMS for 324 & 327 Facilities
FS4.1.3	"Gap Analysis" and Implementation Plan for ISMS for PFP
FS5.1.1	Issue 324/327 Area Project Management Plan
FS5.2.1	Identify, Package and Ship 200 Legacy Waste Containers in 327 Hot Cells
FS5.3.1	Design/Procurement of Materials/Systems to Package Cesium; Prepare for Disposition of Nordium Cesium Capsules
FS5.4.1	Size Reduce Racks 1B, Containerize Dispersibles, Ship Dunnage
FS6.1.1	Complete WATS Phase II Activities
FS7.1.1	Improve Schedule Maintenance Performance at Plutonium Finishing Plant (PFP)
FS8.1.1	Prepare PFP Strategic Vision Plan
FS8.1.2	Issue PFP Reengineering Plan; Initiate Implementation
FS9.1.1	Safety and Conduct of Operations Improvement Over FY 97
FS9.1.2	Implement Comprehensive Drill Program; Demonstrate Effectiveness
FS9.1.3	Demonstrate FY 98 Corrective Action Management Improvement Over FY 97

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FLUOR DANIEL HANFORD, INC.
FEE DETERMINATION FOR THE PERIOD
OCTOBER 1, 1997 THROUGH SEPTEMBER 30, 1998

Critical Few Performance Incentives Met:

- FS11.1.1 Complete Each FY 98 Radiological Control Improvement Program (RCIP) Milestone
- MGR1.1.1 Reduce Project Direct Costs by \$21.2 Million
- SID1.1.1 Production Readiness Acceptance for Finance/Supply Management Modules
- SID1.2.1 Complete All Work Planned for Y2K Project
- TWR1.1.1 Unreviewed Safety Question Organic Resolution
- TWR1.1.2 Vapor Space Data
- TWR1.1.3 Refined Safety Analysis and Double Shell Tank (DST) Flammable Gas Expert Panel Results
- TWR1.1.4 Gas Sampling for Flammable Gas
- TWR1.1.5 Tank Monitor and Control System Connections
- TWR1.2.1 Authorization Basis
- TWR1.2.2 Modifications to Basis for Interim Operations and Technical Safety Requirements
- TWR1.2.4 Basis for Interim Operations Window 3 Actions
- TWR1.2.7 DNFSB 93-5
- TWR1.2.8 Characterize for Organics
- TWR1.2.9 Characterize for Flammable Gas
- TWR1.2.11 Drawing and Labeling
- TWR1.2.12 Single Shell Tank (SST) Interim Stabilization
- TWR1.2.13 Ultrasonic Examination of One DST
- TWR1.2.15 Tank Waste Samples
- TWR1.2.16 Tank Waste Characterization Reports
- TWR1.2.17 Tank Waste Information
- TWR1.3.2 Replace Compensatory Measures
- TWR1.4.2 Radiological Controls Program
- TWR1.4.3 ISMS
- TWR2.1.1 W-211 Title II
- TWR2.3.2 Vadoze Zone
- TWR2.4.2 Readiness to Proceed Document on TWRS Privatization Phase I
- TWR3.2.2 FY 99 Advanced Work Authorization
- TWR3.3.1 W-314 Valve Pit Upgrades
- TWR3.3.2 W-314 AY Upgrades
- TWR3.3.3 W-314 AZ Upgrades
- TWR3.4.1 W-320 From C-106
- TWR3.4.3 W-030 Vent System
- TWR3.4.4 Declaration of Readiness for Operation of Supernate Line; Operational Test of Slurry Line
- TWR4.1.1 W-519 Data Package

CONTRACT DE-AC06-96RL13200
FLUOR DANIEL HANFORD, INC.
FEE DETERMINATION FOR THE PERIOD
OCTOBER 1, 1997 THROUGH SEPTEMBER 30, 1998

Critical Few Performance Incentives Met:

- TWR4.1.2 W-519 Design Deliverables
- TWR5.1.1 W-464 Validation
- TWR6.1.1 W-465 Performance Assessment and Validation
- TWR6.1.3 Borehole #1
- TWR6.1.4 W-465 Waste Form Testing
- TWR6.2.1 W-520 Concept Design
- WM1.1.1 Characterize and Dispose of 2200 183-H Drums; Characterize 10,100 Waste Packages
- WM2.1.1 Return On Investment Projects FY 97-37 and FY 97-48
- WM3.1.1 Utilize Waste Receiving and Processing Capabilities
- WM4.1.1 Plant Processing Rates Increased; Maintenance Outages and Required Cleanout Minimized
- WM4.1.2 Liquid Effluent Sitewide Waste Acceptance Criteria
- WM5.1.1 Deactivation of Radioactive Liquid Waste System and Portions of the 340 Complex
- WM6.1.1 Complete Evaporator Campaign 98-1 or Perform a Cold Run
- WM7.1.1 Implement Hanford Analytical Services Quality Assurance Requirements Document
- WM8.1.1 Upgrade Strategic Plan; Develop Benchmarks and System to Allow Transfer of Treatment, Storage, and Disposal Costs
- WM9.1.1 Achieve Efficiencies and Quality in Operation of Laboratories
- WM10.1.1 ISMS Gap Analysis; Complete RCIP Actions
- WM11.1.1 Waste Management Activities Beginning at active <90 day Storage Pads Managed by Generator Services Organization

Critical Few Performance Incentives Not Met:

- SNF1.1.1 KW Fuel Retrieval Construction
- SNF1.1.2 Construction/Installation of KW Integrated Water Treatment System
- SNF1.1.3 Submit 100K Safety Analysis Report
- SNF1.1.5 Fabricate K-West Multi-Canister Overpack (MCO) Loading System
- SNF1.1.6 Office of Civilian Radioactive Waste Management Quality Assurance
- SNF1.1.7 Complete Management Self Assessment Plan
- SNF1.1.8 Deliver K-East/K-West Basin In-Pool FRS Equipment
- SNF1.2.1 Canister Storage Building
- SNF1.2.2 Submit Canister Storage Building Final Safety Analysis Report
- SNF1.2.3 Multi-Canister Overpack Handling Machine Installation

CONTRACT DE-AC06-96RL13200
FLUOR DANIEL HANFORD, INC.
FEE DETERMINATION FOR THE PERIOD
OCTOBER 1, 1997 THROUGH SEPTEMBER 30, 1998

Critical Few Performance Incentives Not Met:

- SNF1.4.1 Cold Vacuum Drying (CVD) Facility Design and Finalize Procurement
- SNF1.4.2 Construction of CVD
- SNF1.5.1 1St Shipment of MCO Baskets
- SNF1.5.2 MCO Topical
- SNF3.1.1 Sludge Pretreatment Process Selection
- SNF5.1.1 Establish Technical Baseline
- SNF6.1.1 RL Approval of ISMS

FS10.1.1A Install and Test Inert Atmosphere Can Opening System at PFP

Performance Expectation Plan (PEP):

The contractor attained an overall rating of "excellent", resulting in fee earnings of \$5,485,800; 82 % of the available PEP fee pool.



DOE-RL Fee Administration Board Report

Fluor Daniel Hanford, Incorporated
Contract Number DE-AC06-96RL13200

Performance period:
October 1, 1997 through September 30, 1998

TABLE OF CONTENTS

Section	Title	Page
I	SUMMARY	2
II	PROJECT PERFORMANCE SECTION	3
1.	Tank Waste Remediation Systems (TWRS)	3
2.	Waste Programs Division (WPD).....	13
3.	Spent Nuclear Fuels Division (SNF)	20
4.	Facility Stabilization Project (FS)	27
4.1	324/327 Buildings Subproject	27
4.2.	B-Plant / Waste Encapsulation and Storage Facility (WESF) Subproject	29
4.3.	Plutonium Finishing Plant (PFP) Subproject	30
4.4.	300 Area Fuel Supply Shutdown (FSS) Subproject.....	32
5.	Advanced Reactors Transition / Standby Project Office (ART/SPO).....	32
6.	Infrastructure / Landlord / Site Services	33
7.	Hazardous Materials Management and Emergency Response (HAMMER)	37
III	MANAGEMENT AND SUPPORT PERFORMANCE SECTION	38
8.	Office of Environment, Safety, Health, and Quality (ESH&Q)	38
8.1	Environmental Assurance, Permits and Policy (EAP).....	40
8.2.	Quality, Safety and Health (QSH)	43
8.3.	Performance Assessment.....	48
9.	Office of Concerns, Resources and Quality (CRQ)	49
10.	Office of the Chief Financial Officer (CFO)	49
10.1.	Hanford Site Planning and Integration	49
10.2.	Budget	51
10.3	Financial Management	53
10.4	Contract Finance and Review Programs	54
10.5	Procurement	56
11.	Project Management	57
11.1.	Configuration Management	57
11.2.	Engineering and Construction Programs	58
11.3	Site Systems Engineering.....	59
12.	Human Resources / Contractor Workforce Programs	60
13.	Technology Management.....	61
14.	Economic Transition	63
15.	Safeguards and Security	64
16.	Technical Training and Qualification	67
17.	Office of External Affairs	68
18.	Office of the Chief Counsel.....	70
19.	Maintenance and Work Control.....	71
IV.	OTHER SIGNIFICANT ISSUES AND EVENTS	72

I. SUMMARY

The RL Fee Administration Board (FAB) was convened on Friday, December 18, 1998, to review the RL Line Management and Functional Support Management assessments of FDH performance against the criteria established in the FY 1998 Performance Expectation Plan for the FDH 'MEGA' fee incentive. The "MEGA" incentive includes all aspects of FDH performance under the contract not covered by the "Critical Few" Performance Incentives. The maximum fee potential for the "MEGA" incentive for FY 1998 is \$6,690,000. In the Project Performance area, the FAB gave FDH an "Excellent" rating. In the area of FDH Overall Management and Support Performance, the FAB gave FDH a "Good" rating. In the area of Significant Issues and Events, the FAB found significantly more Major Accomplishments than Deficiencies. On a composite basis, the FAB recommends an overall rating of "Excellent" for FDH with payment of 82% of the available "MEGA" fee potential.

Performance in the second half of the fiscal year was much improved over that of the first half. At the end of the fiscal year, there was a trend of solid improvement in most major areas of importance. The areas where improvement trends had not been noted by the end of the fiscal year were: Quality Assurance; Criticality Safety; Subcontract Administration; and Technology Management. In each project and functional support area, there were generally more *Positive Achievements* than there were *Areas for Improvement*. There were very few *Deficiencies*. There were no areas rated "Unsatisfactory". In all areas that were rated "Marginal": the Plutonium Finishing Plant (PFP), Procurement, and Training; performance improvements in the last half of the fiscal year were universally noted. The strong finish in FY98 established a good foundation upon which improvements can be made during FY99.

The rating highlights include:

- | | |
|--|-----------|
| • B-Plant/Waste Encapsulation and Storage Facility | Superior |
| • Advanced Reactors Transition (Fast Flux Test Facility) | Superior |
| • Human Resources/Contractor Workforce Program | Superior |
| • Tank Waste Remediation System | Excellent |
| • Waste Management | Excellent |
| • Infrastructure and Site Services | Excellent |
| • HAMMER | Excellent |
| • Employee Concerns | Excellent |
| • Budget | Excellent |
| • External Affairs | Excellent |
| • Chief Counsel | Excellent |

In addition to the project and functional area specific achievements, there were a number of major accomplishments and a couple of major deficiencies that were noted by the FAB. The accomplishments and deficiencies are as follows:

Major Accomplishments

- The overall Project Hanford Management Contract (PHMC) sitewide safety record improvement.
- Performance of the Facility Evaluation Board (FEB).
- PHMC program improvements as a result of the Plutonium Reclamation Facility (PRF) incident. Demonstrated by the picric acid event and other evaluations.
- The PHMC teamwork on the 1100 Area Transfer to the Port of Benton and the economic diversification

reutilization of Hanford facilities.

- TWRS safety posture improvements including implementation of the Basis for Interim Operations, closure of major Unreviewed Safety Questions, and Phase I verification of the Integrated Safety Management System.

Major Deficiencies

- PHMC overall implementation of an effective Corrective Action Management System.
- PHMC overall implementation of sitewide criticality safety.

In summary, the FAB recommends an overall rating of “Excellent” for FDH with payment of 82% of the available “MEGA” fee potential.

II. PROJECT PERFORMANCE SECTION

1. TANK WASTE REMEDIATION SYSTEMS (TWRS) - Rating: Excellent

The ratings for each of the TWRS Divisions are as follows:

- Waste Disposal Division – Excellent
- Waste Storage Division – Good
- Safety and Characterization Division – Excellent
- Tank Operations Division – Good
- Management Systems Division – Superior

1.1 Safety and Health Performance

1.1.1 Safety and Characterization Division

Positive Achievements

1. The Contractor designed, tested, and fielded an improved mobile glove box for grab-sampling, which resulted in a reduced number of personnel and environmental contaminations for grab-sampling operations.
2. Implementation of the Basis for Interim Operations (BIO) required the development of new procedures for calculating structural loads on tank domes, including baseline loads from existing conditions and soil overburden, as well as loads from equipment used in the farms, such as cranes, trucks, and exhausters. A new procedure was developed and implemented, and dome calculations were revised in accordance with this new procedure, allowing rotary-mode core sampling to proceed.
3. Fluor Daniel Hanford (FDH) and Lockheed Martin Hanford Corporation (LMHC) provided excellent support to the TWRS Integrated Safety Management System (ISMS) verification review conducted September 28 through October 9, 1998.
4. The Contractor has made significant progress in transitioning from the TWRS Interim Safety Basis to the TWRS BIO with the completion of the BIO Window 3 actions and completion of the BIO Compensatory Measures.

5. The TWRS Authorization Basis documentation is readily available through the Contractor's PROCINFO automated information management system.
6. The Contractor's Engineering Change Notice (ECN) process, coupled with the TWRS Docket process, substantially strengthens the TWRS Authorization Basis.
7. The Contractor developed an Exposure Monitoring, Reporting, and Exposure Records Management program (HNF-PRO-409, Rev 0) to further improve the monitoring for exposure and toxicological effects of chemical exposures in the tank farms. This program meets the Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.1020 and 29 CFR 1910, Subpart Z requirements.
8. The Contractor developed a comprehensive ergonomics program plan to effectively reduce the frequency, severity, cost, and physical exposure associated with musculoskeletal disorders and injuries in the tank farms (HNF-IP-0842.IX, 4.3, Rev 0). The program meets the National Institute of Occupational Safety and Health (NIOSH) Elements of Ergonomics and OSHA 29 CFR 1910.5 (a).

Areas for Improvement:

1. In a recent contamination event, it was not clear to the sampling system Operators if and/or when respirators were required to be worn, to re-enter the contaminated work-site. In this specific event there were no uptakes of contaminated materials. However, an improvement in the conduct of operations is needed in this area.
2. In response to the Richland Operations Office (RL) direction in letter number 98-SCD-098, FDH provided a status on the implementation of the TWRS Project Authorization Agreement (AA). The TWRS AA was signed by RL and FDH on July 24, 1998, and became effective on September 22, 1998. The TWRS ISMS Phase I Verification Review conducted from September 28, 1998 through October 9, 1998, reported a concern that the environmental permits, which are part of the TWRS Authorization Envelope, are not being managed with adequate configuration control, which is required by the TWRS AA.
3. The annual update of the *High Level Waste Storage Tank Farms/242-A Evaporator Standards/Requirements Identification Document (Tank Farm S/RID)* was not accepted by RL due to:
 - an incomplete submittal (the chapter on configuration management was not submitted, and
 - the omission of pertinent technical requirements, specifically from DOE 5480.28.
4. The FY98 safety performance reflected a slight downturn as compared with FY97. Reporting of Total OSHA Recordables decreased slightly, from 31 in FY97 to 26 in FY98. However, severity of the injuries increased with a total of 15 OSHA Recordable Lost and Restricted Workdays Cases reported in FY98 versus 11 in FY97, resulting in a final injury rate of 1.32 injuries per 200,000 work hours.

1.2 Environmental Performance

1.2.1 Waste Storage Division

Areas for Improvement

1. The preparation of the Project W-314 Notice of Construction (NOC) was completed late; it was originally planned to be completed in September 1997, but RL was not able to submit it to the Washington State Department of Health (DOH) until December 1997. Following this submission, the DOH found incorrect information that was submitted informally. The DOH's approval of the NOC included many restrictions. The Contractor was defensive and efforts to resolve and implement the DOH requirements were inefficient, delaying the resolution by approximately three months.

1.2.2 Management Systems DivisionPositive Achievements

1. The Contractor completed the NOC permit applications for Rotary-Mode Core Sampling, SX-104, and Project W-030, to meet Project deadlines. The Contractor is also on schedule to meet the Resource Conservation and Recovery Act (RCRA) Part B permit application in June 1999. Lastly, the Contractor developed an on-line environmental compliance program in FY 1998.
2. Higher quality communication with the U. S. Department of Energy (DOE) was achieved in the area of permit application preparation. The Contractor provided higher quality support for Tri-Party Agreement (TPA) commitments, including M-41-00 and M-40-07.

1.3 Training/Quality of Workforce**1.3.1 Safety and Characterization Division**Areas for Improvement

1. Training is inadequate for the FDH Radiological Control Technicians in the area of emergency preparedness, as demonstrated in the emergency drills conducted in support of the Project W-320 Operational Readiness Review.
2. The TWRS Emergency Management (EM) Program has demonstrated an unacceptable record of repeated deficiencies during the fiscal year, including the following:
 - Poor execution of emergency response by the Radiological Control organization;
 - Inaccurate or out-of-date procedures/instructions;
 - Ineffective support of the BIO administrative controls;
 - Poor EM Program planning for materials and equipment;
 - Poor drill execution;
 - Ineffective or incomplete EM (classroom) training;
 - Late classification/notification of TWRS (simulated) emergencies.

One major impact of the deficient performance was to delay on three separate occasions the initial startup of newly completed TWRS projects (W-058, W-030, and W-320) when Operational Readiness Review activities revealed inadequate EM training and preparation within the TWRS Workforce. The repetitive nature of the deficiency has raised a question about the ability of the Contractor to properly protect the workers and the general public in the event of an actual emergency.

1.4 Performance of Work

Positive Achievements

1. TWRS has established more credibility with the DNFSB during FY98, by closing out the TWRS activities related to Recommendation 92-4, and establishing a path forward for closing out the remaining Recommendation 93-5 activities.

Areas for Improvement

1. The Washington State Attorney General filed an intent to sue DOE declaration for missed single-shell tank interim stabilization milestones. The milestones were missed in FY1998 as a result of operational safety issues in FY1997, which resulted in a DOE-directed moratorium on saltwell pumping. Contractor planning, scheduling and management must prioritize work to meet new single-shell tank interim stabilization consent decree milestones.
2. Contractor management, control, and emphasis on safety issue resolution to prevent operational delays are necessary to maintain schedules and meet milestones.

1.4.1 Tank Operations Division

Positive Achievements

1. The contractor completed one million man-hours without a lost workday. This constitutes a record performance in the history of tank farm operations.
2. Immediate closure of some findings and cooperation during the process of performing surveillances and assessments are indications that the contractor is committed to improving conduct-of-operations.
3. The Contractor has done an adequate job in the following areas: management involvement, evaluations of plant events, and improvements in maintenance, conduct of critiques, development of corrective actions, and applying lessons learned.
4. The Contractor implemented a Facility Excellence Program (FEP) at Tank Farms as well as within the TWRS offices, and performed a good job in improving the execution of administrative tasks.
5. The management team for Tank Farm Operations has been effective in maintaining the proper interface with DOE counterparts in order to promote teamwork and enhance the safety culture in conduct-of-operations.
6. Management strives to emphasize quality and safety over productivity. A good example of this was the Characterization Project Operations (CPO) self-initiated review of the accuracy of the drawings for the Light Duty Utility Arm (LDUA). That review revealed numerous inaccuracies in the drawings. As a result, CPO management, on their own initiative, indefinitely postponed the deployment of the LDUA until the accuracy of all of the LDUA drawings was established.

Areas for Improvement

1. Even though significant improvements have been noted in several areas since the new contractor took over, enhancement and improvement are necessary in some areas. This is based on the results of our assessment and analysis of the Facility Representative Monthly Reports for the past 12 months. Within this period (excluding August and September 1998), Facility Representatives identified approximately forty-five (45) findings through Surveillances and Assessments of different facilities within TWRS. These findings were related to a variety of functional areas, such as procedural violations and conduct-of-operations shortcomings. In addition, the contractor was delinquent in more than thirty (30) issues related to a variety of functional areas.

1.4.2 Safety and Characterization Division

Positive Achievements

1. The Contractor designed, tested, and fielded three new sampling systems. These systems were:
 - An improved Mobile Glovebox for grab-sampling, which reduced the number of personnel contaminations,
 - A large volume, 500 milliliter, grab-sampler which was used to support the TWRS Privatization Project, and
 - A "finger trap" sampler which was used to recover fine, dry wastes which could not be recovered using conventional sampling methods.
2. The Contractor supported the development of a proposed TPA milestone related to the disposition of wastes containing separable organics. The new milestone was proposed during TPA milestone dispute negotiations with Washington State Department of Ecology (Ecology).
3. The Contractor provided support to help RL prepare for a briefing to the Defense Nuclear Facility Safety Board (DNFSB) on the Flammable Gas safety issue.
4. The Contractor supported an important briefing to the DNFSB technical staff at Headquarters (HQ), regarding the technical basis for Organic Complexant Safety Issue resolution.
5. The Contractor took the initiative to empanel a team of experts, to better understand the phenomenon and possible mitigation paths for the crust growth in tank 241-SY-101.

Areas for Improvement

1. The development process for Advanced Work Authorizations (AWA)/Baseline Change Requests (BCR) needs improvement. After announcing a new procedure for BCR development, the contractor proceeded not to follow the new procedure and as a result one AWA took as long to process as a regular BCR would have.
2. Proactive championing of innovative solutions or alternate paths to solutions that save time and/or money need to be institutionalized.
3. The understanding that all Multi-Year Work Plan (MYWP) scope must also be completed even if that scope is not covered by a specific Performance Expectation needs to be recognized by the Contractor staff.

1.5 Schedule Performance

1.5.1 Waste Storage Division

Areas for Improvement

1. Schedule performance for the W-314 was poor, from the beginning of the calendar year through August 1998. A Baseline Change Request (BCR) was approved in August, which reconciled a \$6M schedule variance. Although this BCR was approved by RL, the variances of the baseline schedule performance during the year needed to be addressed in a timely fashion.

1.5.2 Safety and Characterization Division

Positive Achievements

1. The Rotary Mode Core Sampling Systems (RMCS) were qualified for rotary mode sampling operations in flammable gas atmospheres and were returned to service in December 1997. The Characterization Project was initially behind schedule during FY98, primarily because of delays in RMCS deployment. However, the Contractor recovered, and completed all MYWP sampling commitments twelve weeks ahead of schedule. At the end of FY98, the Contractor completed the FY98 workscope 4 percent ahead of schedule and 13 percent under budget.

1.5.3 Management Systems Division

Positive Achievements

1. The Technical Basis Review (TBR) process, used to develop the TWRS FY99 MYWP, is the most rigorous planning and estimating tool being used on site.

1.6 Cost Performance

1.6.1 Management Systems Division

Positive Achievement

1. The performance of the contractor in funds management and work control has been superior. Net uncommitted funds at years end, excluding capital projects, was 0 percent of allocated funding. TWRS had a 6.3 percent favorable cost variance. FDH stayed in constant communication and teamed with DOE on all financial aspects of the program, anticipated problems, and consistently tracked solutions to completion.

1.6.2 Waste Storage Division

Areas for Improvement

1. Programmatic cost performance for "Tank C-106 sluicing" is unsatisfactory. Actual programmatic

cost for "Tank C-106 Sluicing" in PBS TW04 is \$20.2M compared to the MYWP baseline cost of \$14.1M. Major part of the higher cost was to meet the higher expectations of the operational readiness of a project. The higher expectation was learned during the Independent Operational Readiness Reviews of Projects W-030, "AY/AZ ventilation system" and W-058, "Cross-site transfer system."

1.6.3 Safety and Characterization Division

Positive Achievements

1. The Contractor was able to increase performance in Technical Basis and Reporting, and Sampling Operations. The increased performance allowed the Characterization Project to contribute approximately \$5.0M to other TWRS Program elements. The Characterization Project was also able to absorb additional workscope to support the Privatization Project's Readiness to Proceed and provide Sample materials to the Privatization Contractor, BNFL, Inc. Calculated at fiscal year-end, the Contractor completed their FY98 workscope 4 percent ahead of schedule and 13 percent under budget.

1.7 Project Management Performance

1.7.1 Waste Storage Division

Positive Achievements

1. The development and preparation of Project W-519 documents required to meet Critical Decision 2, Approval of Baseline, was excellent. Although Critical Decision 2 is a DOE activity, the Contractor provided full support to the Project Manager.
2. The Monthly Review Meeting (MRM) continues to be an excellent project management tool.
3. Although there were many setbacks to Project W-314, there was good performance to find an alternate transfer pipe route that will lower costs and operate more efficiently and effectively.
4. Project Management on Project W-320 was excellent. Even though the cost was higher than the baseline, Project Management has done an excellent job of monitoring, and resolving continuously emerging issues for this complex and highly scrutinized project. Successful Project Management was the major reason for completion of the project within the baseline schedule.
5. The Contractor completed the housekeeping effort in the 209-E building Critical Assembly Room/MIX (CAR/MIX) room.
6. The Contractor resumed Rotary Mode Core Sampling.
7. The Contractor attained a 60% reduction in the size of work packages (e.g. removed unnecessary forms and documents).
8. The Contractor reduced the maintenance backlog by 1200 items.

9. The Contractor reduced, by over 1500, the number of total craft work activities, thereby improving craft utilization.
10. The Contractor initiated B Plant transfer under Clean-Out Box Justification for Continued Operation (JCO).
11. Good support was provided in the TPA negotiations associated with M-41 milestones, single-shell tank (SST) Stabilization.
12. The Contractor obtained RL approvals on LDUA, clean-out box JCO, Project W-465, Immobilized Low-Activity Waste Interim Storage, and preliminary safety evaluation.
13. The Contractor established a characterization strategy for unexplained crust level growth in Tank 101-SY.

Areas for Improvement

1. Unwillingness to provide DOE Project Management and project staff with planning information on emerging issues. DOE must request the information from several layers of management and staff in the performance of their responsibilities.
2. There was not a timely response to DOE's requested change to Project W-519, and DOE was not kept up to date in total on cost and schedule changes.
3. There is a need for more timely completion of operating procedures that have had, until now, a two-year review cycle.
4. There is a need for timely completion of the operating plan for the SY-101 crust level growth issue.
5. There was marginal performance in anticipating project needs for SST Stabilization, as demonstrated in the late submittal of the JCO associated with clean-out boxes; and the need for a dilution system for Tank SX-104.
6. The integration of work is still suffering; there are still too many subcontractors in the loop that are not closely integrated. The results are too many delays in transmitting information and lack of clear and timely direction.
7. Improvement is needed in Contractor controls of operational project performance to identify problem areas in cost and schedule to assure corrective actions are developed. Many problems could be resolved prior to them becoming issues that require baseline changes with impacts on other areas.
8. Quality assurance verification is needed when FDH/LMHC Management signs-off that corrective actions are complete. Many deficiencies and issues have been identified as closed and completed, and later found by DOE not to be corrected.

1.7.2 Waste Disposal Division

Positive Achievements

1. Management of the "Initial Tank Retrieval System," Project W-211, continues to be well managed, with quality work being completed on schedule and within cost, with minimal contingency usage. The team has responded well to changing priorities that were driven by requirements to support the immobilization contract signed with BNFL, Inc. The project management and support staffs do an outstanding job of supporting DOE activities and communicating with DOE.
2. The Hanford Tanks Initiative, tank heel retrieval activity, continues to make good progress and is breaking new ground with innovative ways of involving private industry in development of solutions for retrieving waste from single-shell tanks. In addition, key contracts, which support the Hanford Tanks Initiative, were awarded on schedule. The Hanford Tanks Initiative is also well integrated with the Vadose Zone program activities through information and technology sharing.
3. The Contractor provided a high quality Readiness-To-Proceed product to DOE for review. This was accomplished on time, and the required backup information was well organized. Support for the DOE review teams was also very good.
4. The monthly meetings for Storage and Disposal activities have exceeded expectations. The information provided has enabled the DOE manager and staff to stay abreast of developing issues, and enabled them to properly represent these activities at the Senior Management level.
5. Monthly meetings for the Retrieval Project and Waste Feed Delivery have been very good during the second half of the year. The contractor staff has been candid in all topics of discussion with DOE and has been very good about following up on actions assigned during these meetings.
6. The Storage and Disposal contractor staff provided timely and effective support to DOE in the distribution of the 1998 Performance Assessment to HQ, Ecology, and the Nuclear Regulatory Commission. The Storage and Disposal contractor staff also routinely provided DOE with timely assistance on preparations for the Monthly Project Manager's Meeting with Ecology. Finally, the contractor project staff has been very effective in communicating the Immobilized Low-Activity Waste vadose zone and groundwater modeling strategy-needs to the Hanford Groundwater Project.
7. The contractor communicated candidly with DOE during development of the "What-If Cases" associated with the BNFL, Inc., contract negotiation.

Areas for Improvement

1. Poor management and integration of tank farm resources continue to cause delays to tank farm construction projects. While schedules are resource loaded, unique personnel resources have not been effectively managed, causing delays to key activities such as the Tank AZ-101 mixer pump test and the Light Duty Utility Arm (LDUA) deployment.

While tank farm Operations have been implementing a new system for scheduling manpower 60 to 90 days in advance of the work, Retrieval Project activities are not being accomplished in accordance with the MYWP schedule. Within two weeks of having signed the FY99 Performance Agreements (PA's), DOE was informed that work on the LDUA would probably slip because of limited tank farm operational personnel. Although this did not occur during FY98, this would imply that the

scheduling system has not been as effective as proposed and further work needs to be done in this area.

2. The Contractor did not demonstrate the ability to complete parallel activities identified in the MYWP on schedule and in a quality manner during the first half of the year. Activities associated with Performance Agreements (PAs) received high priority focus at the expense of activities not associated with PAs. For example, the Readiness-To-Proceed activities impacted a number of other Feed Delivery activities such as support for Hanford Tanks Initiative (HTI) meetings and DNFSB deliverables. Specifically, operators were not available for training on the LDUA because of "higher priority work." When viewed in conjunction with comment #1 above, a trend of ineffective management of tank farm resources continues to be present.
3. Planning for work required beyond Privatization Phase I has been limited and this has made interactions with internal and external organizations difficult. For example, delays in SST pumping leave TWRS without a clearly articulated set of needs for vadose zone and groundwater modeling, and has made negotiation of a path forward on SST Retrieval, with Washington Department of Ecology, difficult. In addition, planning for Defense Nuclear Facility Safety Board (DNFSB) Systems Engineering deliverables was overlooked early in the fiscal year. This contributed to failure to meet two DNFSB deliverables.

In the second half of the year, the contractor has emphasized the need to accomplish planning for work required beyond Privatization Phase I, and it is being reflected in the planning for the FY99 MYWP. Preparation of the SST Mission Analysis demonstrates that efforts are now being made to plan the Phase II retrieval work.

4. The Contractor's evaluation of the Immobilized High-Level Waste (IHLW) Interim Storage Facility Project W-464 schedule risk, in the January 1998 Readiness-to-Proceed Memorandum, did not include the results of a December 1997 feasibility study on the modification of the Materials Handling Machine (MHM) for the 4.5 meter canister. The December 1997 feasibility study indicated that the 4.5 meter canisters required a stronger and heavier MHM, which in turn had a major impact on the seismic design criteria. When the W-464 Conceptual Design Report (CDR) was issued for review on February 27, 1998, the seismic issue had not been resolved; and furthermore, it was determined that the Spent Nuclear Fuel Project objected to taking the MHM out of service for modifications. Consequently, a highly compressed schedule to revise the CDR to address these problems was required in order to be ready for project validation in April 1998. In this situation, DOE believes the management and communication of important risks should have been better.
5. During the first half of the year, the Contractor was reluctant to provide DOE with Information Copies of documents and correspondence that have been produced under the Project Hanford Management Contract (PHMC). To obtain needed information, DOE requested the documents from several levels of management. Delays of days and weeks were the norm. While DOE's right to all information was not challenged, Contractor management delayed delivery of requested information to the maximum extent possible, thus impeding DOE management and staff in the execution of their assigned responsibilities. Since the interim evaluation, there has been a remarkable improvement in this area, with the exception of the HTI project and in certain instances in the Storage and Disposal areas.
6. With the exception of construction projects, the Contractor lacked customer focus during the first half

of the year, and needed to provide more information on emerging issues and work status to DOE.

Since the DOE Interim Evaluation, significant improvement in Customer Service has been made. The HTI was an exception to this. Emerging HTI issues are slow to be brought forward and the full extent of the issues are not shared until the last moment.

7. Prior to delivery of the Readiness-To-Proceed product, the Contractors' communications and information-sharing with DOE was very controlled and DOE was left without an adequate understanding of the product that was evolving.

1.7.3 Safety and Characterization Division

Positive Achievements

1. Project Management performance across the Characterization Project was exceptional this fiscal year. The management team composed of FDH, LMHC, Waste Management Federal Services of Hanford (WMH), and Numatec Hanford Company (NHC) worked cooperatively with DOE-RL to develop the fiscal year MYWP, Performance Agreements (PAs), and BCRs. The management team was responsive to the dynamic nature of the Privatization Project and its need for tank waste information and requests for large sample volumes. Additionally, the management team participated proactively in the Characterization Partnering Team, which included members from Ecology, DOE-RL, FDH, and LMHC.

2. WASTE PROGRAMS DIVISION (WPD) – Rating: Excellent

2.1 Overall Performance

Positive Achievements

1. Customer relations in the Liquid Effluent Facilities (LEF) program and Hanford Analytical Laboratory Operations have improved.
2. Waste Management Federal Services of Hanford, Inc. (WMH) was a pacesetter in integration teamwork to implement actions that addressed site-wide Chemical Management System (CMS) initiatives.
3. WMH personnel continue to be key players in the national Environmental Management (EM) integration effort. Several representatives of WMH are recognized as key subject matter experts and have been picked to present the results of the effort to the U. S. Department of Energy (DOE), Headquarters (HQ).
4. WMH has also been a key participant in "Regional" integration efforts. Several cooperative arrangements have been made with Idaho National Engineering Environment Laboratory (INEEL), including treatment of Bettis-Waste Experimental Reduction Facility (WERF) ash at T-Plant and certification of Hanford waste for a burn at the WERF facility.
5. A key integration effort has also been in the coordination and development of the Hanford waste

disposition maps. These key documents were included in the *Accelerated Clean-up: Paths to Closure* plan, the consistency and accuracy of the maps are critical to the integrated planning approach between sites as portrayed.

6. Customer service for Transportation has been consistently rated by the customers as exemplary.
7. The WMH approach to performance of the Integrated Safety Management System (ISMS) "Gap Analysis" was based on line management/facility involvement. This approach ensures facility ownership of the ISMS implementation.
8. LEF support to Bechtel Hanford Company, Inc. (BHI) during the N-Basin Dewatering Campaign was superior.
9. The first Hanford Category 2 nuclear facility DOE 5480.23 Facility Safety Analysis Report (FSAR) was developed and approved.

Areas for Improvement

1. Corrective Action Management needs overall improvement. Various reviews during the period have indicated that previous corrective actions taken were ineffective.
2. Continued improvement in radiological conduct of operations across all WMH facilities and activities is needed.
3. Resolution and closure of 222-S compliance actions from the Washington State Department of Ecology (Ecology) Notice of Correction was slow and incomplete. Deliverables on waste stream characterization were delayed for months past a reasonable time for completion. The deliverable submitted did not include revisions to the related sampling and analysis plan, despite commitment to do so 12 months previous.

Deficiencies

1. Loss of polychlorinated biphenyl (PCB)-containing samples that were stored at Waste Sampling and Characterization Facility (WSCF) for potential future use indicates deficient procedures or practices and internal chain of custody issues.

2.2 Safety and Health Performance

Positive Achievements

1. Response to emergencies and occurrences in LEF has improved throughout the year.
2. WMH Voluntary Protection Program (VPP) has established an excellent example of worker ownership in 222-S Maintenance, with identification of tasks, assignment of champion at working level (craft), and tracking of progress.
3. Lessons-learned from Project W-087 were successfully transferred to the Phase II of Project W-178. This is an excellent example of understanding and implementing the basic concepts of an Integrated

Safety Management System (ISMS).

4. Overall safety and health performance was excellent based on negotiated performance indicators of lost/restricted workday case rates, Occupational Safety and Health Administration (OSHA) recordable rates and an active Safety Program development. The WMH OSHA recordable injury case rate is 52% below the FY97 rate (through Aug.) The WMH lost- or restricted-workday case rate as of the end of August is 47% below the rate measured at this time last year. The number of the actual recordable and lost/restricted workday cases is less than half (47%) of the number of cases at this time last year.
5. WMH is the first Project Hanford Management Contract (PHMC) Major Subcontractor to receive a rating of 1 by the FEB. It was received for Occupational Safety at the 300 Area Liquid Effluent Facility Project.
6. The WMH approach to performance of the ISMS "Gap Analysis" was based on line management/facility involvement. This approach ensures facility ownership of the ISMS implementation.
7. WMH 200 Area Liquid Effluent Facility (LEF) has pressed on in the area of identifying and reconciling Authorization Basis boundaries with Flour Daniel Hanford Company (FDH).

Areas for Improvement

1. Need to expand the use of Automated Job Hazards Analysis (AJHA) from maintenance into operations.
2. With the exception of LEF, WMH-managed facilities continue to need emergency response improvement, with focus on performance-based emergency drills; and movement towards a total effective Emergency Planning Program

2.3 Environmental Performance

Positive Achievements

1. Performance in this area has been excellent as evidenced by the U. S. Environmental Protection Agency's (EPA's) rigorous National Emissions Standards for Hazardous Air Pollutants (NESHAPS) Level II major stack assessments on the 340 Facility, Waste Receiving and Processing Facility (WRAP) and the 242-A Evaporator, which resulted in only minor issues of concern.
2. No Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or Emergency Planning and Community Right-to-Know Act (EPCRA) reportable spills occurred from WMH facilities during the period.
3. The Contractor provided excellent technical support for the review and preparation of the mixed low-level waste (MLLW) and low-level waste (LLW) National Environmental Protection Act (NEPA) documentation for waste disposal.

Areas for Improvement

1. Resolution and closure of 222-S Laboratory compliance actions from the Washington Department of Ecology, Notice of Correction, was slow and incomplete. Deliverables on waste stream characterization were delayed for months beyond a reasonable time for completion. The deliverable submitted did not include revisions to the related sampling and analysis plan, despite commitment to do so, 12 months previous.
2. The Contractor needs to improve the quality of permit submittals. Permit writers do not appear to incorporate operational attributes accurately.

2.4 Training/Quality of Workforce

Areas for Improvement

1. Elimination of an on-the-job training (OJT) position at 222-S, and resultant lack of facility-based OJT may have contributed to the need for a facility stand-down in June 1998. This was a concern that was identified in the 1997 Facility Evaluation Board (FEB) Assessment.
2. The Contractor needs to continue updates of worker qualification packages.
3. Better matching of training to job requirements to minimize costs and meet ISMS expectations is needed.
4. Increase the Training Organization support to the laboratories and LEF.

2.5 Performance of Work

Positive Achievements

1. WMH/Hanford Analytical Laboratory Operations successfully met most customer needs despite uncertainty of future work and numerous operational and organizational changes and challenges. This is confirmed by third-quarter customer surveys showing very good customer satisfaction. At a midyear survey at WSCF, over 90% of customers responding were satisfied, and over 90% of turnaround times were met. 222-S succeeded in meeting most commitments for all customers, until the June 1998 stand-down, and responded well in prioritizing restart activities and producing results for customers after the stand-down. For example, production at 222-S was managed so that commitments for TWRS were exceeded, despite capacity lost due to TWRS sampling delays in the first quarter. Analytical Services exceeded the planned 20.0 Analytical Equivalent Units (AEU's) by accomplishing 23.6 AEU's of analysis with a 6% reduction in the cost of unit services. 222-S has developed a highly detailed and complex analytical work planning process that has facilitated this success. However, work shutdown at the end of the year negatively impacted other results.
2. Special Analytical Services work in completing the TWRS Vapor Samples Laboratory Analysis Reports 1998 deliverable, as recognized by RL/TWRS.
3. WMH 222-S management responded to negative trends in Radiological Problem Reports (RPR) and other work process indicators by establishing work groups to evaluate the trends in June 1998. They were proactive in suspending work on June 26, 1998, instituting an orderly process for restart of

work, and developing short and long-term recovery plans.

4. Conduct-of-Operations in the performance of work continued to improve throughout the year. All FEB assessments of WMH activities have shown an improving trend over previous years' assessments.
5. Generator Services was successful in expanding its handling and characterization services across the Hanford site. Examples are as follows:
 - Generator Services performed an integral role in the BHI/WMH N-Basin water campaign effort;
 - Generator Services performed a lead role for the PHMC in the Multi Media inspection team on waste designation issues;
 - Generator Services supported the Pacific Northwest National Laboratory (PNNL) special project to characterize the "Legacy Wastes";
6. Paducah gaseous diffusion plant corrective actions were expeditious.
7. Customer relations in the LEF program have shown considerable improvement.
8. Implementation of Enhanced Work Planning has resulted in better work packages, requiring fewer work package modifications.

Areas for Improvement

1. Continued improvement in communication and integration with the other PHMC sub-contractors and other sitewide organizations
2. Continued improvement in radiological conduct-of-operations across all WMH facilities and activities.
3. Integration of the maintenance work control processes into operations.

Deficiencies

1. As a result of inadequate planning to achieve enhanced work planning (radiological screening) as committed by WMH for September 30, 1998, laboratory facility operations were suspended. The suspension had adverse impacts on meeting customer needs and requirements, including Paducah breached container incident.

2.6 Schedule Performance

Positive Achievements

1. Work has been completed in the Liquid Effluent Program on or ahead of schedule.
2. The W-178 project has been very successful in maintaining the potential to meet Tri-Party Agreement (TPA) Milestone M-32-02. Early in the fiscal year (FY), a viable path forward within available funding was established. In the second half of the FY, excellent planning and scheduling mitigated

the effects of the shutdown necessitated by facility operations, and delays due to regulatory issues, beyond the projects' control. A smooth restart was accomplished and lessons were incorporated.

3. Eight Safety Analysis Reports for Packaging (SARPs) were processed. Three were cancelled, four were reviewed, and one was released. This completed the FY98 scope of work identified in the SARP Upgrade Plan.
4. The WMH Configuration Management Implementation Plan was completed and approved by the WMH and FDH on March 25, 1998. WMH also supported the Site Engineering Leadership Team that completed the required site essential drawing baseline and performance metric.
5. WMH analytical laboratories successfully met an aggressive schedule for shipment of TWRS samples to British Nuclear Fuels, Limited (BNFL).

Areas for Improvement

1. There is a need for increased rigor in project schedules.
2. Schedule performance for WRAP startup, WRAP Facility Safety Analysis Report (FSAR) and Master Safety Analysis Report (MSAR) was not good. All incurred significant schedule slippage.

2.7 Cost Performance

Positive Achievements

1. WMH continues to demonstrate superior cost performance, except on WRAP.
2. WMH exceeded the sitewide standard of 90% occupancy rate for occupied facilities. Through mid-September the occupancy rate for all WMH controlled facilities is 93%.

Areas for Improvement

1. Startup costs for WRAP were badly managed, continually overrun and generally impacted all other maintenance activities in the program.
2. Better management of pooled resources is required; charging to closed accounts must be avoided; indirect passbacks were poorly managed. These activities did not allow funds to be spent prudently.
3. FDH kept charging to the University of Maryland account after it had been closed.

Deficiencies

1. WMH was slow to develop a path forward for disposition of TWRS privatization wastes from Savannah River Technology Center. The wastes were received early in FY98. In addition, there is no plan for disposition of future wastes.

2.8 Rework Required

Areas for Improvement

1. Continue integration of generator services across the site
2. Clarification and understanding of customer needs and requirements, especially in the waste treatment arena.
3. Treatment formulation needs to be better researched to prevent incidents such as the Bettis fly ash treatment rework.

2.9 Pollution Prevention and Energy Efficiency

Positive Achievements

1. Cost savings in excess of \$14.5 M and waste reductions of over 5,700 metric tons (mt) of sanitary waste, 95 mt of hazardous waste, 1600 cubic meters (m3) of LLW and 2.5 million m3 of MLLW (237 m3 solid), for 142 accomplishments reported.
2. Established an FY98 Goal Strategy for meeting the Secretary of Energy's 1999 waste reduction goals.
3. Led efforts for the RL-hosted DOE National Pollution Prevention Conference XIV in Seattle.
4. Won a National Pollution Prevention (P2) award for public outreach and partnership.
5. Developed a matrix of energy-efficient alternative products for bulbs and ballasts currently used at Hanford.

2.10 Project Management Performance

Positive Achievements

1. The N Basin Drain dewatering campaign was completed successfully through excellent integration efforts between WMH and Bechtel Hanford Company, Inc. (BHI). During the execution of this project, situations that could have delayed the project were analyzed and resolved in an expeditious and efficient fashion.
2. Project Management Institute Tri-Cities/Columbia Basin Chapter recognized successful completion of W-087 as the 1997 Project of the Year.
3. WMH accomplished the move of Generator Services personnel from 209-E quickly once the path forward was selected. The evaluation of alternatives for the move was thorough.
4. WMH placed managers with broad commercial and government experience at the analytical laboratories. The managers' knowledgeable background and experience was evidenced in the response to the occurrence of missing samples at WSCF. It was also evident in planning and implementing corrective actions employing industry standards.
- 5.

6. Continued improvement in providing additional value to the customer wherever possible, was demonstrated through completion of the additional screening of 183-H Empty Bag Drums (4672 weighed, 471 identified) at a cost savings; and the successful support to the 300 Area campaign for receipt and disposal of Hitman Liners despite large schedule delays and technical problems experienced by the customer.
7. Effective management of resources and priorities has allowed the Waste Management Program (WMP) to accomplish major project objectives and overcome obstacles as evidenced by:
 - Identifying a viable path forward within available funding for project W-178, protecting attainment of a TPA milestone through value engineering,
 - Redirection of the 183-H Drum project.

3. SPENT NUCLEAR FUEL DIVISION (SNF) – Rating: Good

3.1 Overall Performance

Positive Achievements:

1. Significant additional talent for engineering and project management was added to permanent staff during the year. A safety analysis manager and Deputy Project Director were among those added. This has improved performance.
2. New integrated technical, cost, and schedule baselines were developed and withstood the scrutiny of intensive Richland Operations Office (RL), regulator, and Defense Nuclear Facility Safety Board (DNFSB) reviews, resulting in a basis for agreement in establishing enforceable Tri-Party Agreement (TPA) milestones. The joint effort to review the Basis of Estimate documents was viewed as a very positive step in collaboration on baseline management. RL was able to more rapidly validate and approve the baseline as a result of this effort. In addition, improvements for the future were openly discussed and implemented where needed, without formal action being required.
3. The Deviation Notice Process established by the contractor is an excellent mechanism for recognizing Project trends early. This mechanism allows individuals who are executing the work to raise potential issues without having to use the established approval process (the change control system).
4. Contractor organization changes in June 1998 established a unified project between Fluor Daniel Hanford (FDH) and Duke Engineering & Services Hanford Company (DESH), which has significantly improved performance. In addition, the contractors have re-engaged in collaborative efforts with RL to resolve some of the most difficult technical and safety issues.
5. The Project has worked diligently to streamline controls for individual projects including the cold vacuum drying facility, which has been critical path for over two years. There is now a unified team on this project rather than multiple subcontracts with unclear interfaces.
6. The safety analysis documentation is very near critical path for the project. During FY98, the project brought in a strong nuclear safety manager and used experienced consultants to supplement staff to improve the quality of documentation. Improved communications and a better understanding of the requirements that must be met if the project is to achieve success in FY99 Facility Safety Analysis

Report (FSAR) reviews has been established. Frequent meetings are occurring to communicate expectations between the U. S. Department of Energy (DOE) and the contractor, as well as between the contractor project and nuclear safety teams.

7. FDH and DESH supported DOE efforts well in responding to General Accounting Office (GAO) inspectors and Congressional investigators. RL successfully met its obligations to supply required project documentation, largely through contractor efforts. In addition, FDH and DESH have demonstrated significant improvement in their responses to DNFSB and the Independent Review Panel (IRP) in the past year. It is evident that practice and thought is going into these presentations.
8. While there continue to be many quality assurance issues to resolve, FDH and DESH have had an impact on the quality of work performed for the project by others. Project quality assurance personnel are engaged and effecting improvements. Demonstrated integrity in quality matters has been evident.
9. While much improvement is still expected, the Project Director and Deputy Project Director have made an impact on dealing with problems urgently and in mentoring key personnel on effective management techniques.
10. The Spent Nuclear Fuel Project (SNFP) successfully completed a crosswalk of the management self-assessment plan activities with schedule line items and Standards/Requirements Identification Document (S/RID) requirements.

Areas for Improvement

1. Project quality assurance (QA) program implementation has been a major concern for the project and requires additional action to ensure safe and correct completion of project work. General Service QA requirements need to be clarified and QA requirements for testing equipment also must be clearly established and enforced. The QA aspects of Multi-Canister Overpack (MCO) basket fabrication remain issues of concern to ensure that cost-effective production is assured in the Site Fabrication Shop. Improvements in the QA audits of suppliers need additional attention for remaining procurements.
2. RL has been unable to approve the Phase 2 Safety Analysis Report (SAR) for the Cold Vacuum Drying Facility (CVDF) process equipment since it was first submitted in February 1998. Inconsistencies in design and safety analysis information appear to be remedied but lack of certification of the design to S/RID's and Nuclear Regulatory Commission (NRC) equivalency remains a major concern. This is a major design issue that requires urgent resolution for the entire project.
3. The results of the Project Hanford Management Contract (PHMC) Facility Evaluation Board (FEB) review, which rated K Basins as 'Below Expectations' and the DOE Conduct of Operations review concluding that the Basins failed to meet the RL expectation for a Hazard Category 2 nuclear facility, have shown a need for improvement in the following areas listed below.
 - Corrective Action Management
 - S/RIDs Program Management
 - Safety Analysis Reports – further improvements will be necessary to succeed in meeting schedules during the coming year. Focus must include the completion of supporting design documentation as well as optimization of the SAR preparation review and approval process.

- Configuration Control – internal assessments have shown deficiencies in configuration control across the SNFP.
 - QA Implementation – SNFP identified a number of quality assurance compliance and implementation issues during the past year, resulting in a planned Price Anderson Amendments Act of 1988 (PAAA) enforcement conference during October.
 - Procedural Compliance – SNFP organization continues to make positive progress in the use of, and adherence to, technical procedures. However, assessment findings still show less than adequate application of administrative requirements.
4. Implementation of the Human Performance Improvement Plan has not demonstrated success as a result of the multiple work control issues that have been raised on the project. In addition, the commitment to complete an assessment of the improvements resulting from this plan and provide the results to RL was not performed.

Deficiencies

1. Performance expectations as stated in the DOE Performance Expectation Plan (PEP), were for the contractor to perform the work scope contained within the Multi-Year Work Plans (MYWP) and Annual Work Plans (AWPs) in a timely manner, with minimum rework, and with good quality. The overall performance to this expectation has not been satisfactorily achieved on the SNFP. While there have been some accomplishments achieved during the year, these fall short of the DOE expectations. For example only 9 of 37 milestones have been completed. The critical path was delayed for eight months during FY98 because of poor performance on Cold Vacuum Drying (CVD) design and lack of funds to pursue planned work following late identification of project cost overruns. These problems seriously jeopardized on-going TPA negotiations. Poor cost and schedule control resulted in a GAO and Congressional Committee investigation of the SNFP, more frequent detailed reviews by the DNFSB, and additional oversight by other regulatory agencies under the tri-party agreement.
2. The DOE PEP also states that the contractors' failure to oversee, through acts of commission or omission, the conduct of operations and all of its employees, which potentially or actually causes property damage or loss, endangers the safety, health or environment, or compromises the ability of the Department to carry out its mission, will be weighed heavily in the performance evaluation. The following concerns have been identified:
 - DOE Letter 98-SFD-199, dated September 30, 1998, identified several examples where the Authorization Basis requirements for K Basins and a DOE Order safety requirement were not met. This letter further strongly identified RL concerns with FDH delays to resolve and follow-up personnel safety and nuclear safety issues;
 - FDH has not provided timely resolution of an Unreviewed Safety Question (USQ) on the K Basins drain valves. This USQ identifies a condition, which potentially endangers safety, health and the environment. This USQ has been outstanding for approximately one year. FDH further failed to comply with DOE direction to install an engineering solution to resolve this USQ on the drain valves by September 18, 1998.
 - The ability for DOE to carry out its mission to assure removal of degraded spent nuclear fuel from the K Basins is accomplished safely is being compromised by the failure to demonstrate that new construction designs meet applicable safety requirements. DOE letter 98-SFD-189, dated September 11, 1998, identified that the required codes/requirements information was not provided in the CVD FSAR submittal. The information provided in the FSAR submittal did not

demonstrate compliance with DOE Order 6430.1A, or the Spent Nuclear Fuels NRC Equivalency document, and this deficiency was identified as a significant, recurring failure to comply with the requirements for documentation of design adequacy. DOE letter 98-SFD-178, dated September 3, 1998, identified that the safety class design requirements and applicable codes had not been provided as required in the Cask Loadout System (CLS) Safety Analysis Document (SAD).

3.2 Safety and Health Performance

Positive Achievements:

1. The Occupational Safety and Health Administration (OSHA) recordable case rate has averaged less than half of FY97 rates, and Lost/Away Workday case rate has dropped from an average of about one per month to near zero.
2. The K Basins Authorization Agreement has been signed. In addition, the Phase I verification of the K Basins Integrated Safety Management System (ISMS) was performed by RL.
3. The SNFP reached a significant achievement by completing one full year without a skin or clothing radiation contamination. This accomplishment is especially important as we perform more work in the K-East Basin, where contamination levels are higher and the potential for contamination is significant.

Areas for Improvement:

1. The Phase I ISMS identified many items requiring further action. There is a major concern that line management has not fully embraced ISMS implementation for the project. Progress for SNFP is starting to fall behind and is not meeting original schedules. Successful implementation means a successful Phase 2 inspection and a satisfactory Operational Readiness Review (ORR). Much work remains to be accomplished for the Phase 2 inspection in FY99.

3.3 Environmental Performance

Positive Achievements:

1. Improved coordination of Comment Resolutions and timely response to concerns have been noted in the permit development arena. 95% of all SNFP permits have been completed.
2. The Contractor provided a thorough evaluation of a suspected leak from the Basins when high levels of tritium were discovered in one K Basins area monitoring well.
3. The Contractor fully supported the DOE and U. S. Environmental Protection Agency (EPA) efforts to transfer the SNFP from regulation under Resource Conservation and Recovery Act (RCRA), to regulation under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Deficiencies:

1. Contractor management failed to recognize the importance of maintaining continuity on resolving

Washington State Department of Health (DOH) issues with the 100K area potable water supply during a period of high contractor personnel attrition. In addition to delaying DOE commitments to the DOH for resolution of these issues, K Basins nuclear safety documentation was adversely impacted because of a delay in replacing the existing water plant gaseous chlorine system.

3.4 Training/Quality of Workforce

Positive Achievements:

1. CERCLA required training goals were successfully achieved.

Areas for Improvement:

1. Weak engineering direction and integration with the subprojects continues to be a problem. Examples include delayed resolution of the drain valve issue, lack of clear demonstration of compliance with DOE and NRC requirements in SAR documentation and lack of a strong sense of urgency to drive technical and engineering issues to closure.
2. Operator re-certifications were not accomplished in a timely manner. Re-certification requirements should have been properly planned-for, in order to ensure adequate time for re-certification and avoid the need for extensions.

3.5 Schedule Performance

Deficiencies:

1. Completion of SNFP Milestones generally fell behind schedule over the first half of the fiscal year, at which point Project execution deviated from the baseline, further slipping milestone completions. Only about one quarter of the approved baseline milestones (that are not specifically incentivized by PAs) were met within an acceptable timeframe. The Contractor's discipline in executing the baseline schedule needs to improve. The following are examples of milestones not completed in accordance with the baseline.
 - S06-98-006, Complete Cask/Transportation Fabrication and Delivery of 5 Cask/Trailers by June 26, 1998. This milestone was not completed within ten days of the baseline date. All casks and trailers were here by September 4, 1998.
 - S05-98-004, FY 98 MCO's Available for Testing by August 6, 1998. This milestone is not completed.
 - S04-98-630, FY 98 Critical Decision 3B for the K West Basin Integrated Water Treatment System CNSI Installation Approval by February 18, 1998. This milestone was not completed within ten days of the baseline date. The milestone was completed on August 28, 1998.
 - S04-97-352, FY 98 Critical Decision 3B for the K West Basin Fuel Retrieval System Installation Approval by March 2, 1998. This milestone was not completed within ten days of the baseline date. The milestone was completed on September 21, 1998

3.6 Project Management Performance

Areas for Improvement:

1. Contract administration coordination between the construction manager (Fluor Daniel Northwest) and the fixed-price construction contractor (Mowat) remains weak. Over \$25 Million in contract modifications remain undefinitized. The schedule for resolving these contract actions, submitted to RL in February 1998, has not been met.
2. Contractual ownership by subproject managers, in the area of requirements, change control, and vendor quality, is being stressed. Improvements have been noted in the fuel retrieval system and MCO handling machine. Issues are still occurring with the cold vacuum drying (CVD) equipment procurements and with the integrated water treatment system. With 70% of the project outsourced, continued diligence and control must to be applied on all subprojects.

Deficiencies:

1. The contractor did not control costs within budget for the year. Significant amounts of work had to be deferred to FY99 because of additional funding requirements identified late in the year. This occurred despite submittal of a revised project baseline on December 5, 1997.

3.7 Rework Required

Deficiencies:

1. The CVD First Article drying equipment was received with questionable configuration and with dirt inside systems and components. Insufficient specification of requirements for this work created many of these problems and extensive rework of the units was required.
2. Configuration of K Basins electrical equipment has been worked almost continuously for years but significant rework has been required to fully establish a safe electrical configuration.
3. Late and ineffective implementation of quality assurance requirements for the fabrication of MCO baskets in the site fabrication shop resulted in delays and rework.

3.8 Project Management Performance

Positive Achievements:

1. Both the Cask/Transportation Systems (CTS) and MCO subprojects have had numerous challenges throughout the year. Some successes are as follows:
 - MCO Cask Safety Analysis Report for packaging was completed;
 - Cask Design report complete;
 - MCO Design report complete;
 - MCO Loading System Design report complete;
 - All five Cask/Trailers complete and delivered to Hanford;
 - Both the MCO Loading Systems for K-East and K-West Basins completed;
 - K-West Basin Crane Modifications complete;
 - Most of the MCO tooling complete;

While some performance problems have occurred, the management of these projects is considered to have been well executed. Issues that developed were quickly addressed to maintain control.

2. Contract issues with Foster-Wheeler on the procurement of the Multi-Canister Overpack Handling Machine (MHM) have been resolved. At midyear these issues remained outstanding and appeared formidable. DESH took corrective action with regard to personnel assignments that resulted in all contract issues being closed and delivery of the MHM to the Hanford site.
3. DESH took action to improve the performance of the CVD project by bringing a new project manager onboard. Completion of First Article Testing, of CVD drying equipment was a significant step in verifying the SNF drying process. It is noted that CVD personnel spent many after-hours sessions in order to complete the testing program on time.
4. SNFP is leading the site in making the FY99 MYWP available on the Internet and maintaining it current throughout the year.
5. After a slow start, the entire project fully supported the shipment of fuel from Building 327 to the K-East Basin. This was an important action to support reduction of expenses on site.
6. The sludge chemical pre-treatment process flow diagrams were submitted on time
7. Safety basis enabling assumptions were closed out. Clear focus on remaining major safety issues was provided and close follow-up has been provided to resolve these problems.
8. The contractor effectively established a critical path review meeting which is conducted by a senior staff manager each week to ensure no surprises are encountered on the Project. This effort is recognized widely as being effective on the Project.
9. The contractor took charge of the weekly project management review meeting with DOE, DNFSB, and EPA and is effectively reviewing the status of major project actions in a timely fashion.

Areas for Improvement:

1. A significant amount of Project work appears to be extending the schedule. There is a concern that unless work can be fully completed on or ahead of schedule, additional delays will start to occur. It is not clear that subproject managers are protecting the float they have on their work completion dates. This could lead to increased costs and risk to successful completion of the baseline.
2. Lack of effective training of project personnel, on cost estimating requirements, remains a concern because such training will help to ensure that project budgets and schedules are followed.
3. Increases in project staffing to achieve required levels of operators and radiological control personnel must be managed carefully to ensure project success. In particular getting these personnel prepared for Operational Readiness Reviews (ORR) appears to be a challenging task. Management attention to this area needs to be increased.

Deficiencies:

1. Late implementation of project controls and sound bases of estimates for work, resulted in late identification of Project cost overruns. The result was a six-month delay in CVD and Canister Storage Building (CSB) work because of a lack of capital funding for FY98. This was identified approximately five months into the FY, which was too late for DOE to find other funding sources, or to obtain Congressional approval for a fund reprogramming.
2. The Contractor did not meet commitments to eliminate the gaseous chlorine plant in the K Basins. This plant represents the highest personnel safety risk in the K basins, yet the Contractor failed to assign personnel to follow up on this matter as requested.
3. The Contractor does not have an effective tracking system to ensure major commitments, including those for nuclear safety, are properly completed on time. During the year there were repeated instances where commitment dates for important safety actions were overlooked.

4. FACILITY STABILIZATION PROJECT

General Comments

The Contractor has demonstrated what it takes to be successful and "Best in Class" on the B-Plant Sub-project, but has not demonstrated the expected progress on the Plutonium Finishing Plant (PFP) Sub-project. Improved performance and progress at PFP has been slower than anticipated. While some notable improvements have been achieved, very limited progress in stabilizing reactive plutonium was made during the reporting period. This has required expending extraordinary hours preparing for and responding to visits and requests for information from oversight and regulatory agencies such as the DNFSB, DOE Environment and Health (EH) groups, and the Washington State Department of Ecology (Ecology) who continue to express their disappointment and frustration with the continued poor operation and lack of progress at PFP.

Specific Sub-Project ratings are as follows:

- 324/327 – Good
- B-Plant/WESF – Superior
- PFP – Marginal
- 300 Area Fuel Supply Shutdown - Good

4.1 324/327 Buildings – Rating: Good

General Comments:

The overall safety situation of the 324/327 facilities was strengthened as FY98 progressed. Some quality issues were raised, having to do with inadequate attention to details concerning shipments of Cesium (Cs) capsules to the Waste Encapsulation and Storage Facility (WESF) that needed to be returned for rework, and misidentification of fuel segments sent to waste burial grounds. However, BWHC developed a process for improving the quality of the more complex workscope to be accomplished, and continued to improve that process throughout the year. Procedures have also been developed which document this process. Even though the facilities received poor marks on the FEB evaluation on emergency preparedness, the reaction of BWHC personnel in handling the "picric acid" situation was outstanding. As other situations arose during the year where safety concerns were raised (e.g., resolution of tank 113

contents in B cell), conservative stances were taken to ensure adequate reviews were undertaken before further handling of those situations were allowed. A review of the reportable events for the year indicate that actions are being taken to respond properly, critiques are being held and their quality is improving, and the nature of the events reported are not indicative of serious problems with safety at the facility. The delay in developing the 324 and 327 Safety Analysis Report (SAR) upgrades was a major shortcoming during the period.

Environmental activities during the year were conducted satisfactorily with the exception of the coordination of the Pacific Northwest National Laboratory (PNNL) testing of the Tritium generators. Lessons were learned with this event that have carried into succeeding interfaces with the regulators, and there is much more sensitivity within the Project to assuring adequate communication with regulators under all circumstances. In general, the waste management procedures need to be strengthened.

Development of the training program has improved during the year as it has evolved into a more comprehensive program. With the FEB findings indicating weaknesses in several areas, a lot of emphasis has been placed on the development of procedures to document the processes at the facilities. Many corrective actions have been taken to resolve FEB findings, though additional time will be required in order to train the staff on the procedures and to see the results of a more formal operation. Management has also made significant organizational changes to strengthen the safety, environmental and work control processes at the facilities.

Overall, the Contractor's Cost Performance has been excellent, specifically in their ability to accomplish unfunded program workscope while still providing funding back to other Facility Stabilization projects. However, program work scope completed has overrun their budget on the 327 waste bucket processing and the Cesium Chloride (CsCl) program. While the B cell cleanout program did under-run their budget, ~~but~~ there was also a significant amount of carryover workscope that was not accomplished.

Positive Achievements

1. The corrective action plan for Facility Evaluation Board (FEB) findings was submitted and approved by Fluor Daniel Hanford Inc. (FDH) on schedule. Babcox and Wilcox Hanford Company (BWHC)/FDH documentation demonstrates that 90% of the corrective actions due to be completed by September 30, 1998, have been completed, as required.
2. BWHC conducted a spot survey of the adequacy of the documentation and found it to be acceptable. RL staff reviewed closure documentation on 24 of the 26 items with a risk ranking value of 4 or 5, and found those to be adequately documented.
3. RL Transition Programs Division (TPD) has reviewed the Special Case Waste Assessment in support of 324 closure. The documentation has been transmitted to Ecology on June 30, 1998 as required.
4. The Contractor completed the 324/327 Radioactive Liquid Waste System (RLWS) Project Plan as required. This expectation was met with the issuance of two documents, HNF-3133 and HNF-2457; project plans for the RLWS for 324 and 327 buildings respectively. They were both issued by document control on July 29, 1998.

Areas for Improvement:

1. There was inadequate communication and coordination between FDH and its subcontractors, during the isolation of the 340 Facility from the 324/327. Improvement in providing overall guidance, support, and oversight to BWHC by FDH needs to be improved.
2. Improved understandings in meeting Project workscope and needs, beyond just meeting Performance Expectation (PE) workscope, is needed to gain efficiencies in meeting Project objectives. Occasionally, the PE work was completed at the expense of impacting other work scope and/or out year commitments.
3. Intermediate range planning is weak, resulting in inadequate resources to maintain equipment availability, as demonstrated by unavailability of manipulators, cranes frequently not available for program work, lack of management attention to pre-existing waste conditions and follow up to actions to resolve waste designation issues, and excessive time required to troubleshoot and repair B cell crane.

4.2 B-Plant/Waste Encapsulation Storage Facility (WESF) – Rating: Superior

Positive Achievements:

1. WESF has been operated the entire evaluation period without any violations of Environmental Laws, U. S. Department of Transportation (DOT) requirements, Operating Safety Requirements (OSR's), and Interim Operating Safety Requirements (IOSR's), related to the storage and transportation of WESF cesium and strontium capsules. This included the final shipment of overpack cesium capsules from the 300 Area to WESF without incident.
2. Submittal of the WESF Resource Conservation and Recovery Act (RCRA) Part A permit application to Ecology (TPA Milestone M-92-03) was completed December 19, 1997, twelve days ahead of the December 31, 1997, TPA milestone.
3. Complete deactivation of the B Plant Liquid Effluent Area was accomplished December 19, 1997, twelve days ahead of the December 31, 1997, RL milestone, and five months ahead of the TPA M-82-06 milestone.
4. Demonstration of initiative and creative engineering in developing a methodology (phosphate soap) to identify likely methods of personnel contamination and reduce the incidence of such events during B-Plant canyon cleanup work.
5. Successful decontamination of the B-Plant canyon. The B-Plant deactivation was completed on September 29, 1998, four years ahead of schedule, saving taxpayers \$100 million. The achievement also reduced the surveillance and maintenance costs of B-Plant by nearly \$20 million per year.
6. Exceptional teamwork and cooperation with regulatory agencies demonstrated by the successful remediation of Tank 100.

4.3 Plutonium Finishing Plant (PFP) – Rating: Marginal

4.3.1 Project Performance (Rating: Marginal)

General Comments

For almost every functional area described in Section 2.1 of the Performance Expectation Plan, FDH has provided little or no guidance, oversight, or support to BWHC during the performance period just ended. The limited guidance that has been provided has largely resulted only after extensive pressure from RL.

The contractor has made essentially no progress toward stabilizing reactive plutonium during the reporting period, and as a result RL has been required to expend extraordinary hours preparing for and responding to visits and requests for information from oversight or regulatory agencies such as the DNFSB, DOE-EH groups, and Ecology who continue to express their disappointment and frustration with the continued poor operation and lack of progress at PFP.

BWHC has demonstrated marginal performance in project execution, integration of multiple tasks and schedules given limited resources, managing resources, establishing clear and defensible task priorities, anticipating problems, work planning, work control, implementation of ISMS principles, integrated and comprehensive waste management program development and execution, and the development of personnel resources to meet project needs. Moreover, this weak performance has continued throughout the fiscal year, despite a clear recognition of these problems in FY97 as evidenced by the PRF explosion and the subsequent significant weaknesses identified by a failed RL Readiness Assessment and a FEB evaluation.

Positive Achievements

1. The Phase I PFP Readiness Assessment was completed and unrestricted movement of fissile material by Phase I groups was resumed in April 1998.
2. The Contractor did complete reengineering and redesign activities during the FY98. The value of that redesign will be realized in FY99.
3. The Contractor instituted badly needed efforts to "projectize" PFP beginning in the spring of 1998.
4. The contractor charted an independent team to evaluate PFP's Criticality Safety Evaluation Reports (CSERs) after the second assessment of nuclear criticality safety at PFP in FY98.
5. The Contractor's self evaluation identifies the actions needed for Tank 241-Z-361 in response to the Chemical Hazard Assessment (CHA). RL acknowledges the overall good performance of this project.
6. The Contractor provided significant improvements in the continuing drill program and in the facility response to emergency situations. This performance was independently validated by assessment teams from EH-24 and RL during FY98.
7. BWHC self identified important programmatic weaknesses in many departments at PFP in its Management Self Assessment of readiness to resume Phase II fissile material movements.

Areas for Improvement

1. The Phase I groups were curtailed in January 1997 along with all other groups, yet it took the

- contractor 16 months to resume these simple movements by these generally well performing groups. The first RL readiness assessment was delayed in November 1998, when the Contractor's facility Criticality Safety Representative and the Vault Operations manager failed to recognize a criticality infraction a Nuclear Chemical Operator (NCO) had recognized and brought to their attention.
2. RL reviews of the Management Oversight Plans (MOPs) for fissile material movements conducted by the Phase II group have consistently identified the need for extensive and frequent rework. In many cases the observations made by RL reviewers are the same observations made by these reviewers during their Phase I oversight activities – or during earlier Phase II group reviews. In this fundamental quality assurance issue alone, the contractor has demonstrated an inability to learn from its mistakes and demonstrate a continuous improvement throughout the facility. Despite RL direction, senior PFP managers are not actively involved in the preparation of MOPs, in pre-movement activities, and in the movements themselves. RL assessors continued to identify significant weaknesses in MOPs, inadequacies in pre-job briefings, poor quality dry runs and walkthroughs.
 3. In late February of 1998, a final check by the Team Leader for the RL Line Management Readiness Review team tasked with determining the readiness of Phase I groups to resume fissile material handling noted that almost 40% of the post-start actions had either missed their due dates, had rescheduled due dates set by the condition owners, or had both rescheduled due dates and were delinquent to the new dates. Contractor senior management was not aware of this problem until it was brought to their attention by RL.
 4. The PRF recovery schedule has continued to slip in FY98. The damaged roof was still not repaired, and the facility is now entering its second winter after the explosion. During the winter of 1997-1998, special efforts had to be taken to brush snow off the roof to ensure it would not collapse. So many conduct of operations and worker safety deficiencies were identified by RL assessors after the explosion that a Joint Review Team (JRT) was established, made up of representatives of RL, FDH, and BWHC. This body reviewed every work package developed for recovery work until it was disbanded the first day of the second quarter of FY98. A simple paper intended to demonstrate that workers could enter PRF without supplied air respiration required numerous rejections by the RL member of the JRT before a good quality document was finally provided. Further, although a Chemical Hazard Assessment (CHA) conducted after the explosion identified several potential liabilities, including unidentified liquids in gloveboxes HC-7 and HC-46F, the work plans to sample and mitigate these potential liabilities were not worked in FY98, despite extensive RL pressure to do so. The liquids in glovebox HC-7 have subsequently evaporated and no longer appear to be present in the glovebox.
 5. The MYWP milestone to vent tank 241-Z-361 was missed. The delay in accomplishing this important task was largely due to a poor quality Sample Analysis Plan that required extensive rework.
 6. The Contractor provided a poor quality cost estimate for the BWHC cost element "234-5Z Cleanup and Deactivation". An independent review of this cost estimate performed by RL and the Army Corp of Engineers during the latter half of FY98 concluded that the estimate was not activity-based, but rather, entirely Level-of-Effort (LOE). Activities were not decomposed to the lowest level, measures of production were not quantitative, there was no basis for the labor hour estimates, and inadequate descriptions of subcontractor workscopes and material purchases were evident.

7. The Contractor provided poor operation of the criticality safety program at PFP, and numerous Operational Safety Requirement (OSR) related equipment items were delinquent on required maintenance
8. PFP completed only a small percentage of its FY98 workscope, and failed to begin stabilizing reactive plutonium bearing materials. Tough efforts to correct longstanding procedure related problems at PFP took place during the performance period, evidence suggests that the problems not only still exist, but are widespread and programmatic at the facility.

4.3.2 Overall BWHC Management and Support Performance to PFP (Rating: Unsatisfactory)

Deficiencies

1. BWHC management continues to fail to demonstrate “out of the box” thinking for the PFP project. The main reason for a large budget at PFP for FY99 is the inability of BWHC to perform solid planning, to identify productivity gains and efficiencies.
2. Continued inability by BWHC to produce an adequate specification for the W-460 Plutonium Stabilization and Packaging (PuSAP) project.
3. Modifications to glovebox HC-21A to support safe opening of cans containing hydrided metals were over budget and behind schedule.
4. Direct and extensive RL involvement was required to complete a seriously delinquent Safeguards and Security inventory.
5. Failure to perform the necessary work to allow the Energy Savings Performance Contract (ESPC) contractor to complete the conversion of PFP exhaust ventilation fans during the fiscal year, resulting in additional costs to the government due to the need to provide steam to operate the steam turbine exhaust fans.

4.4 300 Area Fuel Supply Shutdown (FSS) – Rating: Good

Positive Achievement

1. The contractor issued the 303 K Storage Facility FY98 Closure Activities report, HNF-2959 to DOE-RL on July 27, 1998 as required.

5. ADV. REACTORS TRANSITION / STANDBY PROJ. OFF. (SPO) – Rating: Superior

Positive Achievements:

1. The Fast Flux Test Facility (FFTF) management is commended for a very successful and effective job of maintaining the experienced, well-trained staff and facilities to support a potential restart mission. The FFTF Project Team’s positive attitude and focus toward “safety first” and excellence in conduct-of-operations is reflected by the safety record of no lost workday cases and only one restricted workday case for the entire year. The Team’s attention to strive for continuous improvement in all facets of plant operations was realized by the recent Facility Evaluation Board’s (FEB’s) assessment of FFTF. The FEB found the FFTF’s overall performance, including each of the ten functional areas,

to be at “level 2”, meets expectations (standards of performance are high). Other areas that are appreciated are the contractors willingness to respond to special requests and their forthright and timely approach of involving U. S. Department of Energy (DOE), oversight personnel with any issues that arise.

2. Specific noteworthy accomplishments are:

- The required work scope as outlined in the MYWP was completed with a positive cost variance of \$3.8 million. 65 of the 83 total milestones were completed early.
- All four of the important ** milestones were completed on or ahead of schedule. These include; 1) prepare and submit the Technical Information Document, 2) conduct a detailed radiological and hazardous materials survey of the 309 Plutonium Recycle Test Reactor Fuel Transfer Pit, 3) complete the Standby Annual System Assessment Reports (ASARs), and 4) implement a pilot program of Work Process Improvements.
- The Fix-It-Now team was established, which significantly increased productivity.
- The Contractor safely downloaded a loaded core component container (CCC) into an interim storage cask (ISC) from a failed solid waste cask (SWC).
- Cost-effective measures taken included, 1) the redistribution of workloads to minimize the effects of attrition, thereby mitigating the need to hire new staff, 2) a cost/benefit analysis of maintenance services for portable equipment and the decision to use off-site commercial suppliers when deemed less costly, and 3) loaning experienced staff to other Hanford projects.

Areas for Improvement

1. The Prime Contractor needs to be more timely in completing tasks that effect the subcontractors’ ability to conduct follow-on work. Examples are; providing templates for the SRIDS, providing guidelines to the emergency response teams, provide guidelines to the ISMS teams.

6. INFRASTRUCTURE/LANDLORD/SITE SERVICES – Rating: Excellent

6.1 Infrastructure Annual Work Plan (AWP) (Rating: Good)

General Comment

The Infrastructure Program had twenty-six (26) milestones to be completed in their AWP. Of these, one was deleted through change control, twenty-one (21) were completed on schedule, and four were either not met or completed behind schedule.

Positive Achievements

1. The Infrastructure Program (water utilities) has displayed excellent ability to meet the State turbidity requirements. The 200 East Water Plant has received the maximum available filtration credit from the State Department of Health and the 200 West Plant is on the right track to also receive the maximum available filtration credit.
2. The Personal Property walkthrough program issue identified at mid-year has been resolved. The overall program performed to expectations and has maintained a good, operating property management system.

3. During this reporting period the Contractor has performed the electrical utilities function in an acceptable manner. Daily functions are performed in an excellent manner.
4. Building Occupancy: In FY98, great strides to fully utilize the government office space have been made. The occupancy pool is one of the larger costs of the indirect program. A major gain in utilization rates was realized in FY98. The occupancy pool costs for FY98 came in approximately \$2 million below budget.
5. The 200 Area fabrication shops have played key roles in some of Hanford's highest profile cleanup projects. Site Fabrication Services (SFS) supported the Spent Nuclear Fuel Project by fabricating 30 Multi-Canister Overpack (MCO) Fuel Baskets and five MCO Scrap baskets that will be used in the transportation and storage of the spent nuclear fuel now stored in the K-basins. SFS completed fabrication of all jumpers requested by TWRS Tank Farms within the requested time frames. SFS performed emergency overtime support to the Waste Receiving and Processing (WRAP) facility to modify and test a glovebox in preparation for a pending milestone operation.
6. The road maintenance operations have coordinated and supported a record number of mega-weight and oversized loads transported in support of the U. S. Navy submarine reactor program. A record six such moves were made within the 12-month period (from barges arriving at the Port of Benton for transshipment to onsite burial grounds). Each move required intensive management of limited resources and coordination among customers, contractors, state and federal agencies. Road maintenance crews used more than 150 tons of salt and over 3800 cubic yards of sand to ensure traveling surfaces were as safe as possible during foul weather in January. Personnel worked overtime and around the clock to ensure that no serious accidents occurred during the severe ice and snow conditions.
7. FDH aggressively worked with their subcontractors to identify required and essential equipment. Nonessential and non-required equipment was excessed to reduce inventory. Fleet maintenance services were relocated to 200 and 400 Areas.

Areas for Improvement

1. Electrical Utilities: Reluctance still persists to exercise good commercial concepts within the engineering and project disciplines of electrical utilities. Distribution costs have remained constant at approximately \$0.01378/kWh throughout the year. This included wheeling revenue from the Bonneville Power Administration (BPA) which, when excluded, increases the distribution cost to \$0.01518/kWh.
2. The infrastructure program has not been proactive in assuring that the water utilities operators understand the water plant parameters (turbidity, chlorine, etc.) and how they affect water quality and the State of Washington standards. The water quality and State standards knowledge is part of the infrastructure plan to get plant operators to take ownership of the plant. The infrastructure program has not been proactive in assuring that personnel operating the water plants are state-certified as required by the State of Washington Department of Health. Two operators were found to not have permanent or temporary state certifications when RL conducted a walkthrough of the water plant.
3. The poor relationship between water utilities management and operators is of concern to RL. The

attitude of the operators can affect their work performance and ultimately could affect how the water plants are operated.

4. The Vehicle Maintenance group needs to reduce overhead costs.

Deficiency

1. Site Fabrications Services: The fabrication of MCO baskets exceeded cost and schedule and was marred by numerous quality assurance deficiencies.

6.2 Energy Savings Performance Contract (Rating: Good)

Positive Achievements

1. The Contractor met the Expectation for the 200 and 300 Area powerhouse shutdown in March 1998. This was accomplished with the combined effort of all of the contractors involved. In general, the Contractor responded to RL requests in a timely manner.

Areas for Improvement

1. Although the Contractor did meet expectations, they fell short with completing the work at PFP. To date the Johnson Controls PFP work has not been completed because of a lack of PHMC Team support. In the future, FDH should be more involved and proactive in resolving issues between contractors.

6.3 284 East and 384 Powerhouse Shutdown (Rating: Good)

Positive Achievements

1. The activities and schedules as identified in the FY 98 Landlord MYWP were accepted and completed successfully as of April 29, 1998.

6.4 284 Package Boiler (Rating: Excellent)

Positive Achievements

1. The shutdown and deactivation of the boiler was accepted as complete as of March 26, 1998.

6.5 Electrical Utilities (Rating: Marginal)

Areas for Improvement

1. The requirement that the Contractor reduce electrical utility delivery costs to less-than-or-equal-to \$0.01/kilowatt-hour was not met in FY98. Some cost reductions were achieved approaching \$0.012/kWh; however, these have fallen short of the objective of \$0.01.

6.6 Building Occupancy (Rating: Excellent)

Positive Achievements

1. GSA Buildings: The contractor occupancy of the Stevens Center Place reached 91% full in FY98.
2. Federal Office building: The contractor occupancy of the Federal Office Building reached and is currently being retained at over 90%.
3. DOE-Owned/Commercial Leased: The contractor occupancy of the owned and leased facilities met the 90% Performance Expectation Plan (PEP) initiative by the end of FY98.

6.7 Landlord Projects/Landlord Multi-Year Work Plan (Rating: Excellent)Positive Achievements

1. The Landlord program had twenty-two (22) milestones to complete in fiscal year 1998. One milestone was completed behind schedule. A second milestone is behind schedule and had not been completed as of September 30, 1998. Twenty milestones were completed on or ahead of schedule.
2. The Landlord costs stayed within the program limit of \$13.7 million. FDH and DynCorp staff did a good job in keeping their DOE counterparts informed on the progress of the projects, costs, and impacts associated with the program. Project L-279, Outer Area Fiber Optic Loop, was completed with no problems, under budget, and within schedule. The skills of the crafts and project management were exceptional.
3. The transfer of the 1100 Area and the southern portion of the Hanford Railroad were completed ahead of schedule and under budget. Recognition for managing increased scope in an effective manner also added to the success of this project. This was a very complex transfer and involved multiple disciplines and subcontractors.

Areas for Improvement

1. The milestone that was completed behind schedule was associated with Project B-604, Water System Upgrade Reservoir. FDH needs to be proactive in identifying the problems and potential solutions and fielding a team for success. A single organization needed to accept responsibility to complete the project.
2. Project E-027, Reconfiguration of 230 kV Loop 100 Areas Substations: FDH and its subcontractors finally completed the project more than a year after its due-date and have noted no problems in providing all 100 Area electrical service through one primary substation. Skills of craft and workmanship have been exceptional. Project delays were caused by a lack of project management planning and direction.

6.8 SID PHMC Invoice/AWP/MYWP Tracking and Analysis (Rating: Excellent)Positive Achievements

1. The monthly invoices for WBS elements 1.5, 6.1.2, 6.1.4, 7.1.2, and 7.1.4 were reviewed by FDH and written documentation was received within the required time limit.

6.9 Real Estate and Comprehensive Planning Objectives (Rating: Excellent)

Positive Achievements

1. The support for DOE's Real Estate has been outstanding this rating period. Several easements and permits were completed along with a major land disposal (1100 Area with the Southern Connection Railroad). The 1100 Area disposal/Southern Connection Railroad was a very complex transaction, which was accelerated to complete the transfer ahead of schedule. Also, the necessary documents were submitted for the 747 Building to go through the General Services Administration (GSA) disposal process.
2. The commercial lease performance measures have been accomplished. The rental rates have been negotiated at or below the appraised fair annual rental rate. The lease renewals were negotiated at the current rental rates, which were below the appraised fair annual rental rate.
3. Land Use planning was supported in a timely manner. Coordination with State and local agencies was handled in an effective manner considering the political sensitivities.

7. HAZARDOUS MATERIALS MANAGEMENT AND EMERGENCY RESPONSE (HAMMER) - Rating: Excellent

Positive Achievements

1. The Contractor accomplished the following during the FY98 performance period:
 - Started-up and operated HAMMER's first year within budget and without any Occupational Safety and Health Administration (OSHA)/Environmental recordable incidents.
 - Increased training from 1,345 student days (FY97) to over 23,000 student days (FY98).
 - Precedent setting, positive media coverage events within DOE (more than 20).
 - Proactive support of Counter-narcotics Training resulted in securing a \$5M program for HAMMER.
 - Developed and implemented an aggressive and unique hands-on respiratory training course with six international labor organizations in response to Defense Nuclear Facility Safety Board (DNFSB).
 - Transitioned the National Transportation Training Regulatory Compliance Program from the Albuquerque Operations Office (ALO) resulting in a cost reduction in FY98 of \$530K (45% of budget) while providing 33% more training courses.
 - Managed, developed, and piloted 17 Transportation Emergency Preparedness training modules for the DOE complex.
 - Instrumental in the site realizing approximately \$2M savings in Hanford training costs.
 - Overall customer satisfaction evaluations average is 4.7 on a 5.0 scale.
 - Spearheaded the implementation of User Facility and Work For Others (WFO) contracting within FDH, which were non-existent before.

Areas for Improvement

1. Need to implement a proactive, integrated, and well-focused planning approach for the following:
 - Strategic Planning beyond 6 months
 - Integrated Resource Loaded Planning Schedule
 - Complete Business Plan with individual Product Line Manager (PLM) Plans
 - Staffing Plan
 - Budget Cycle (2-year advance)
 - Site Development
 2. Need to implement disciplined and well-defined approach/process to contracting.
 - Flowchart of process
 - Significant amount of agreements returned to FDH
 - Contract review findings
 - Timely execution of contracts
 3. Need to implement a Total Quality Approach.
 - Staff recommendations/Management decisions based on data
 - Cross-functional team approach to milestone completion
 - Flowcharting and statistical analysis by FDH staff
3. Need a disciplined and well thought out plan to reduce costs and subsequently lower the price charged to the customers.

III. MANAGEMENT AND SUPPORT PERFORMANCE SECTION

8. OFFICE OF ENVIRONMENT, SAFETY HEALTH AND QUALITY (ESH&Q) – Rating: Good

General Comments:

In 1998 the FDH ESH&Q office engaged in a significant performance turnaround under a new management team. This turn around was demonstrated in strong showings in Occupational Safety and Health (especially worker involvement and Voluntary Protection Program [VPP] efforts), solid strides in the post Plutonium Reclamation Facility (PRF) explosion Emergency Preparedness activities, and solid efforts in Integrated Safety Management System (ISMS) implementation. The FDH occupational safety statistics reflected this strength by showing strong improvements in FY98.

Areas of continuing concern that served to lower FDH ESH&Q's performance were the maintenance of Standards/Requirements Identification Documents (S/RIDs), the performance of the Quality Assurance (QA) program (which was significantly deficient in FY98), ongoing conduct of operation issues within the Fire Department, and lackluster efforts in improving Nuclear and Criticality Safety programs. A significant deficiency also exists in that the FDH Corrective Action Management System and Deficiency Tracking System problems remain uncorrected after over two years of effort, thus not allowing for solid progress in correcting FDH's long standing ESH&Q issues.

Performance in ESH&Q's key focus areas was as follows:

1. Integrated ES&H Management System (ISMS): (Rating: Good)
Solid efforts were begun in this area in FY98. Achieving TWRS Phase I validation was a significant effort.
2. Radiological Control Improvement Program (RCIP): (Rating: Good)
Milestones continue to be met per the RCIP. Hiring of a Radiological Control Manager was positive.
3. Environmental Protection Project/Chemical Management System: (Rating: Good)
Mixed performance in the environmental area contributed to a good for this element. While environmental reporting and the Environmental Monitoring Program provided excellent performance, the National Environmental Policy Act (NEPA) and Tri-Party Agreement (TPA) areas produced only good performance. While progress continues in the Chemical Management System arena, solid breakthroughs in FDH chemical management performance have yet to come to fruition.
4. Emergency Preparedness Improvement Program: (Rating: Excellent)
This effort has demonstrated appropriate accountability and rigor of follow-up and documentation to result in demonstrated progress in the Emergency preparedness area.
5. Quality of Work (including the overall quality of products, Quality Program efforts and the QA program area): (Rating: Marginal)
The quality of work provided by the ESH&Q organization is sporadic, with documents with technical and calculation errors, as well as typographical errors, routinely submitted. The overall FDH Quality program (including the QA program) was dysfunctional/ineffective during the period, resulting in numerous QA rule violations and subsequent adverse Price-Andersen Act Amendment (PAAA) enforcement activity. Efforts began in late FY98 to rebuild the FDH Quality and QA programs and to instill a quality ethic within FDH.
6. Safety Culture: (Rating: Good)
The roll out of the Employee Involvement training package, with Hanford Atomic Metal Trades Council (HAMTC) support, to all FDH managers, supervisors and employee's was very positive. Pending VPP applications indicate strides are being made in implementing VPP elements into the site culture. Employee involvement efforts, VPP and the implementation of a "Safety Conscious Work Environment" are beginning to show results in a drop of the number of formal employee concerns. However, significant areas of non-support to the new site safety culture still exist, and aggressive management advocacy of the new culture by their field presence has not been sufficient to achieve a turnaround in these areas of resistance.
7. Independent Assessment. (Rating: Good)
The MAC. Chew & Assoc. Independent Assessment function is not well organized into a methodology to attack known or suspected FDH issues. Many reports are ad hoc, and quality of the reports is variable. While the Facility Evaluation Board (FEB) function continues to be solid, the linkages of both the M.C. Chew & Assoc. and FEB functions to a Corrective Action Management System does not ensure that FDH is attacking the root causes of FDH's ESH&Q deficiencies, and thus making any fundamental progress against FDH's long standing ESH&Q issues.

8.1 Environmental Assurance, Permits and Policy (EAP)

8.1.1 Environmental Protection Program/Chemical Management System (Rating: Good)Positive Achievements

1. Fluor Daniel Hanford, Inc. (FDH) ES&H continued effective development and coordination of a site Chemical Management System.
2. The FDH Environmental Protection organization coordinated and directly supported the U.S. Environmental Protection Agency Multi-Media Inspection, and is leading and integrating response actions. Directly related to this, FDH Environmental Protection proactively pursued the establishment of a Hanford Site "situation room" and Compliance Action Tracking System for use in assessing and addressing responses to regulatory enforcement actions.
3. The FDH Environmental Protection organization developed and implemented the Hanford Site Air Operating Permit Intranet home page and interactive commitment tracking system as committed. The demonstrated systems exceeded expectations and will increase efficiencies across the Hanford Site.

Areas for Improvement

1. The FDH Environmental Protection (EP) organization has improved their effectiveness in assisting FDH in its attempts to achieve the required "effective integration of site-wide permits and environmental compliance issues". However, they continue to be hampered by some FDH project offices and subcontractors apparently failing to seek or heed advice and/or assistance from Environmental Protection. EP performance needs improvement in issue coordination and integration and covering all of the compliance inspections and consequent enforcement actions by the regulatory agencies. Additionally, in some situations it appears that the Project Directors and sub-contractors are deliberately trying to avoid the desired integration and coordination to the detriment of the overall Hanford project. Although this situation has improved since the midyear evaluation, overall FDH and subcontractor performance in this area is below where it should be.
2. The FDH and subcontractor effort was marginal in coordinating and preparing well conceived and well written responses to the draft Resource Conservation and Recovery Act (RCRA) Facility Permit Modification D Conditions issued by the Washington State Department of Ecology (Ecology) in a timely manner. The U.S. Department of Energy (DOE), Richland Operation Office (RL) had to repeatedly stress the need for a solid package by the end of the Public Comment Period in the event that an extension would not be granted by Ecology. The first drafts were incomplete, did not provide well-founded arguments for requested changes to the draft permit conditions, and fell short of the needed information to support an appeal of the Resource and Conservation Recovery Act (RCRA) Permit, if needed. The late delivery of the final, official responses to RL by FDH allowed RL less than adequate time for review prior to the submittal to Ecology.

8.1.2 Environmental Compliance Reports (Rating: Excellent)Positive Achievements

1. FDH has consistently prepared quality site-wide environmental compliance reports and provided them to RL in accordance with the Multi-Year Work Plan milestones.

8.1.3 Effluent and Environmental Monitoring Program (Rating: Excellent)

Positive Achievements

1. FDH has provided timely and compliant submission of reports.
2. FDH has been able to provide support for scarce resource areas such as regulatory analysis, regulatory negotiations, and response to environmental occurrences for monitoring and analytical interpretations.
3. FDH has improved interactions and communications with RL staff.
4. FDH advanced the construction schedule for Project W-420.

Areas for Improvement

1. FDH needs to improve the integration of tasks for total accomplishment of projects with management of activities and outcomes as their primary goal.
2. FDH needs to develop better Hanford Site ownership for all activities on site.
3. FDH needs to become proactive for adjusting the activities and milestones throughout the year to avoid crisis management.

8.1.4 National Environmental Policy Act (NEPA) (Rating: Good)

Positive Achievements

1. Activities relative to the NEPA have, in general, been very good. The quality of draft Environmental Assessments and Categorical Exclusions prepared by Waste Management Federal Services of Hanford, Inc. (WMH) and DynCorp NEPA groups continues to improve. The Hanford NEPA Training continues to be outstanding.

Areas for Improvement

1. FDH and WMH efforts to better integrate NEPA consideration into project planning and execution, while not yet showing tangible results, promises a considerable improvement in the future and addresses a long-standing concern.
2. FDH has not proposed to RL a viable mechanism to satisfy DOE, Headquarters Offices' (EH and GC) concerns about continued use of NEPA Site-Wide Categorical Exclusions.
3. FDH has not acted in an integrative role for emerging initiatives and commitments regarding the Hanford Site Solid Waste Programs Environmental Impact Statement (EIS). FDH subcontractors have been working with RL and the EIS preparation contractors, but FDH has been absent.

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4. FDH has delegated site-wide NEPA integration to WMH and DynCorp rather than providing strong central leadership.

8.1.5 Tri-Party Agreement Management, Tracking, and Reporting (Rating: Good)

Positive Achievements

1. Provided excellent support for Interagency Management Integration Team (IAMIT) meetings, including establishment of agendas, maintaining criteria and standards for presentation materials, management of minutes, general IAMIT documentation for administrative record, and management and staff presence during IAMIT meetings.
2. During budget exercises where funding of Tri-Party Agreement (TPA) compliance activities were at issue, FDH ES&H maintained excellent coordination with the Prime and subcontractor budget organizations in order to provide accurate statements of compliance funding gaps.
3. FDH ES&H made real progress in providing needed support to FDH Project Direction staff. These efforts provided more efficient preparation and review of regulatory documents and assisted line organizations with approvals by regulatory staff.
4. The Contractor coordinated legal, budget and technical preparations during dispute proceedings with the regulators.
5. FDH ES&H was instrumental in the preparation of highly regarded briefing materials for several Senior Executive Council (SEC) meetings where DOE, PHMC and regulator senior management met to discuss major Hanford TPA issues.
6. The Contractor provided dependable and accurate periodic reports on the status of actions being taken to meet TPA milestone and target date commitments, including the weekly Critical Items Report.
7. The Contractor supported negotiations and internal preparation sessions with staff and management. Support included taking of minutes, development of negotiation strategy and conduct of meetings. In several cases (Spent Nuclear Fuels dispute), the Tri-Party Agreement Integration (TPAI) manager acted on behalf of RL TPA Administrator.
8. Developed outstanding management briefing graphics used in the Federal Building senior management conference area to maintain TPA commitment status.

Areas for Improvement

1. There has been a lack of Contractor focus on critical support requirements for the TPA during a period of intense regulatory and stakeholder interactions over a wide range of issues. This lack of management attention has also resulted in sub-standard quality draft products (change requests, statements of dispute, negotiation strategies, etc.) being provided which required significant rework.
2. A significant improvement in the TPAI relationship with the regulators is needed. A plan needs to be put in place that provides for independent interactions (coordinated with RL staff) that communicate

and provide status for FDH corporate commitments to regulators.

3. Improvement is needed in the provision of staff TPA support to Project Directors within the PHMC. This support must be focused on TPA-specific support, and not diverted by project management assignments unrelated to the TPA. TPAI staff must clearly understand that their assignment is in TPAI.
4. Improvement in draft TPA documents is needed. Management Quality Assurance is clearly required. Clearer articulation of expectations in this area as well as improved coordination by the RL staff will be needed as a complement to this effort.

8.2 Quality, Safety & Health (QSH)

8.2.1 Emergency Preparedness Improvement Program (Rating: Excellent)

Positive Achievements

1. The Contractor used a disciplined project management approach to implement corrective actions from the Plutonium Reclamation Facility (PRF) explosion. The approach utilized integrated solutions that crossed functional and contract boundaries and resulted in real and measurable achievements.
2. The Contractor responded very successfully to a potential picric acid hazard in the 327 facility in January 1998. The response demonstrated that the corrective actions taken after the May 1997 PRF explosion have improved Hanford's emergency response capability.
3. The Contractor achieved a good rating from the DOE-HQ, EH-2 Emergency Management Evaluation of the Hanford Site. The report noted that FDH was "aggressive and effective in improving Hanford emergency management and correcting issues identified in the response to the May 1997 chemical explosion at PRF."
4. The Contractor successfully streamlined Hanford's emergency management documents by integrating the Hanford Resource Conservation and Recovery Act (RCRA) Contingency Plan (DOE/RL-93-75) into the Hanford Emergency Response Plan (DOE/RL-94-02). This action met key Washington State Department of Ecology (Ecology) expectations.
5. The Contractor sponsored a pilot project at the K Basins for a streamlined and improved emergency preparedness program. The pilot was tested during the annual field exercise and the EH-2 evaluation concluded that, "the integration of emergency preparedness at K Basins is effective."
6. Progress has been made in improving integration of the major subcontractors.

Areas for Improvement

1. Emergency preparedness training needs to be strengthened to provide better performance-based instruction and proper documentation.
2. The improvements in emergency preparedness have been focused on K Basins and the Plutonium Finishing Plant. The same level of commitment is required at the other hazardous facilities under the

PHMC to ensure a consistent level of high performance.

3. Improvement is needed in the timeliness of the review and approval of Hazards Assessments. Approximately 15% of the Hazards Assessments required to be completed by the end of FY98, have been in the review/approval cycle between the FDH EP organization and the major subcontractors that operate the facilities for over six months.

8.2.2 Occupational Safety and Health (OSH) (Rating: Excellent)

Positive Achievements

1. FDH goals for their operations in the OSH area have generally been exceeded. FDH's professional staff support for OSH has been provided to RL and the FDH subcontractors in a timely, accurate, cost effective, responsible, and responsive manner. This has been consistent and over and above the agreements/goals/priorities established by RL ESH (QSH) in the OSH areas.
2. RL and FDH are committed to the safe and responsible performance as a primary mission of their operation/work at Hanford. FDH is a strong supporter, developer, and promoter of the Integrated Safety Management System (ISMS) to improve their performance and their subcontractors' performance. FDH actively used the ISMS guiding principles in the management of their OSH programs.
3. In general, FDH and their subcontractors for FY1998 have successfully managed and implemented the OSH program. There have been no major reported accidents or non-radiological exposures. FDH was reliable and reported OSH issues and established required programs in a quality, timely, and responsive manner.

Areas for Improvement

1. The Contractor needs to evaluate, increase, and conduct longer-term personal air monitoring with effective documentation of negative as well as positive readings, and integrate the results into the EJTA process.
2. The Contractor needs to evaluate if it is cost effective to have respirator fit-testing in the same location as, and part of, the training program.
3. The Contractor should consider and establish an OSHA-type unannounced compliance inspection program, including posting of deficiencies of all their facilities, and the deficiencies of their subcontractors.
4. The Contractor should evaluate, and implement if needed, the establishment and posting of hazards and abatement efforts.

8.2.3 Occurrence Reporting Program (Rating: Excellent)

Positive Achievements

1. The Contractor revised the non-classified notification process, including the training of personnel. The non-classified notification process provides offsite organizations advance notice of Hanford events that have the potential for escalating or when the general public may be requesting information from the offsite organizations. Prior to revising the process, offsite organizations had concerns about how the notifications were implemented. However, since the revised procedure was issued and personnel have been trained, there have been no issues identified.
2. The Contractor implemented a revision to the occurrence reporting Order by revising the FDH implementing procedure and training FDH, major subcontractor (MSC), and RL employees who report occurrences using the Occurrence Reporting and Processing System (ORPS).

8.2.4 Standards/Requirements Identification Documents (S/RIDs) (Rating: Marginal)

Positive Achievement

1. The FDH central S/RIDs organization has developed templates for each functional area so that future S/RID revisions will result in improved uniformity and improved cost efficiencies during revisions of facility S/RIDs.

Areas for Improvement

1. Facility S/RIDs have not been revised by the MSCs on an annual basis as required.

8.2.5 Quality Assurance (QA) (Rating: Marginal)

(Note - This rating would have been lower except for the actions undertaken by the PHMC during the final 2 months of the performance period to identify and resolve QA issues and to address Deficiency Tracking System (DTS) issues.)

Areas for Improvement

1. The Contractor's corrective action management program is inadequate and/or the program has not been effectively implemented as evidenced by repeat deficiencies in the same areas.
2. The Contractor did not prepare the annual revision to the FDH QA Implementation Plan, as required. The Contractor also did not revise the FDH QA program that implements the requirements of DOE/RW/0333P 'Office of Civilian Radioactive Waste Management Quality Assurance Requirements and Description' (QARD). Lastly, the Contractor did not evaluate the impacts of implementing Rev. 7 of the QARD.
3. Numerous deficiencies were identified in the Contractor's QA Program Implementation. Examples include Hanford Site Standards Laboratory deficiencies, poor quality design work by offsite architectural and engineering (A/E) contractors, and inadequate pre-award surveys. (Ref. DOE/RL letter 98-QSH-187)
4. The Contractor has not developed and implemented an effective deficiency tracking system. (Ref. DOE-RL Letters 98-QSH-151 and 98-QSH-170 for specific areas requiring improvement)

8.2.6 Industrial Hygiene (Rating: Excellent)Positive Achievements

1. The Contractor continued to provide support and leadership in the implementation of the Hanford Occupational Health Process, including the revision of the Employee Job Task Analysis (EJTA), coordination of the University of Washington's quality assessment of Contractor-completed EJTA's, and refinement of medical monitoring programs and criteria.
2. The Contractor took a leadership role in the development of the Chronic Beryllium Disease Prevention Program (CBDPP), coordinating a sitewide effort and partnering with other Prime Contractors to integrate the site's approach to complying with DOE Secretarial Notice 440.1. This effort required not only exceptional management skill and coordination, but also the development of highly technical programmatic guidelines and acceptance criteria for the identification of workers at risk of exposure, facility identification and characterization, and facility release to the public.
3. The PHMC Occupational Health Team effectively resolved deficiencies identified following the PRF explosion.

8.2.7 Nuclear Safety and Criticality (Rating: Marginal)Areas for Improvement

1. The Contractor has failed to ensure nuclear safety documents submitted to RL are technically complete, accurate, and adequately meet expectations (for example, SNF Safety Analysis Report [SAR] and the Tank Waste Remediation System [TWRS] Facility Safety Analysis Report [FSAR]).
2. Recognition of systemic problems with nuclear safety document quality is not apparent, resulting in a lack of timely corrective actions.
3. Responsiveness to external audits identifying weakness in the criticality program has not been timely.
4. The Contractor lacks a proactive approach to ensuring the adequacy of major subcontractor nuclear safety programs

8.2.8 Fire Protection Program (Rating: Marginal)Positive Achievements

1. The Contractor performed an integration review of the subcontractors' fire protection programs, which identified deficiencies and strengths in the fire protection program implementation.
2. The Contractor provided RL monthly performance status on fire hazard analysis activities, exemption and equivalencies, and other issues relative to the fire protection program to maintain customer focus.

Areas for Improvement:

1. Fire protection involvement in the Design Review process continues to be deficient and several projects must undergo rework and Change Orders prior to start up.
2. While there has been excellent effort to collect and present data on the fire protection performance indicators, better analysis of the data is needed in order to determine the causes for the data trending; and better management of the program is needed to affect data performance outcome.

8.2.9 Radiological Control Improvement Plan (Rating: Good)

Areas for Improvement

1. Procedure upgrades for the Radiological Control Improvement Program (RCIP) were not issued in a timely fashion because of the FDH-imposed procedure moratorium. FDH oversight of subcontractor implementation of procedures needed improvement to ensure full implementation by September 30, 1998. The Contractor stopped Work at 222-S to upgrade implementation of their procedures for enhanced work planning. The upgrades should have been made earlier to ensure no work stoppages were needed. Lockheed Martin Hanford Company was delayed in implementation of the procedure upgrades for the As Low As Reasonably Achievable (ALARA) program.
2. Training course upgrades for individuals who prepare Radiological Work Permits (RWPs) were less than adequate. The course was taught at a level for those personnel who had never written an RWP. The course was not effective for improving the knowledge and capabilities of individuals who already have some experience in preparing RWPs.

8.2.10 Integrated Environment, Safety, and Health Management System (ISMS) (Rating: Good)

Positive Achievements

1. Recent actions have demonstrated commitments are being made and acted upon by the ES&H organization in support of integrated safety management.
2. The new ES&H manager has demonstrated a notably increased interest in moving forward with the integration of safety management within project management and other organizations.

Areas for Improvement

1. Functional-area programs within the Contractor's ES&H organization need to coordinate more proactively with the other PHMC organizations, facilities and activities, to ensure each ES&H functional area is represented appropriately within the operational ISMS framework. Additionally, the FDH ES&H organization needs to provide a unified, general structure to the PHMC organizations and facilities, to simplify the operational development and implementation of Integrated Safety Management.
2. The roles and responsibilities of the FDH ES&H organization, and the organization's relationship to other PHMC operational organizations have to be better defined. Other organizations, such as Budgeting, Quality Assurance, and Human Resources, require assistance from the FDH ES&H

organization in the development of support roles and responsibilities, as they apply to Integrated Safety Management.

Deficiencies (input provided from AMW)

1. Poor integration of Safety Basis documentation between interacting facilities managed by different major subcontractors.
2. The Request For Proposal (RFP) for liquid waste tanks, funded by Savannah River, took an inordinate amount of time. Poor coordination between major subcontractors, Dyncorp, and enterprise companies was evident throughout the procurement process. Failure to have these tanks completed in a timely manner cripples the ability to receive large quantities of regulated water from generators.

8.3 Performance Assessment

8.3.1 Independent Assessment (Rating: Good)

Positive Achievements

1. The Facility Evaluation Board (FEB) continues as a credible assessment program within FDH.
2. FEB scores from the second and third Visit Reviews indicate modest improving trends in some functional areas.
3. The FDH DNFSB Liaison Office has consistently provided proactive, timely support during this reporting period.
4. FDH's Nuclear Safety Regulatory Compliance (NSRC) organization has taken the lead for the PHMC contract, to ensure Price-Anderson non-compliances are reported into the DOE/HQ Noncompliance Tracking System. The NSRC has also been cooperative with the HQ Office of Enforcement and Investigations (EH-10), and has provided the requested information for EH-10 investigations.

Areas for Improvement

1. FDH has not been aggressive in following-up on deficient areas as identified during FEB facility assessments.
2. The Contractor's Readiness Review process has been less than adequate, primarily because facilities have not been at RL's expected state of Readiness prior to the start of Review activities.

9. OFFICE OF CONCERNS, RESOURCES AND QUALITY – Rating: Excellent

9.1 Employee Concerns Evaluation Report

Positive Achievements

1. The Contractor focused on making improvements to the Employee Concerns Program (ECP) program, as required by Richland Implementing Directive (RLID) 29, including:

- Provided management training in the area of handling professional dissent;
 - Provided mediation training;
 - Created a video for use by PHMC management in staff meetings, manager training and new hire orientation;
 - Standardized the PHMC ECP process, and;
 - Created a survey to be filled out by users of the ECP program.
2. The Contractor used a collaborative approach with RL to acquire the services of a consultant to facilitate management improvement goals.

Areas of Improvement

1. The Contractor needs to improve the trending and tracking of employee concerns to provide Project Hanford Management Contract (PHMC) management with potential areas for review. This could include more specific information about who is raising concerns, the company responsible, and location.
2. The Contractor needs to better define their approach to implementation of the management improvement goals.

10. OFFICE OF THE CHIEF FINANCIAL OFFICER

10.1 Hanford Site Planning and Integration – Rating: Good

Positive Achievements

1. Although the Hanford Strategic Plan update was not required by U. S. Department of Energy (DOE), Richland Operations Office (RL), the Contractor reevaluated the interim and final endpoint targets and validated that no changes were required other than for the Fast Flux Test Facility (FFTF).
2. Effective briefings/presentations were provided to address the issue of streamlining the planning and budgeting process, which was a Salt Lake City follow-on activity.
3. The Contractor played an active role in working with RL to streamline the Mission Planning Guidance (MPG) and the Baseline Updating Guidance (BUG) contents. Both documents are more concise, streamlined, and user friendly. Excellent teamwork was required to get to this stage.
4. After many interactions between RL and the Contractor, the Risk Management Plan was finally issued in February 1998. Although late, the quality of the document was improved during the delay.
5. The Draft and Initial *Accelerated Cleanup: Paths to Closure* documents were submitted on time, and met the intent of the DOE Headquarters (HQ) Guidance. This effort included several new planning tools and graphical representations.
6. A standard Code of Accounts structure, to be used for cost estimating and cost reporting for all Project Hanford Management Contract (PHMC) activities, was developed for incorporation into the new business management system for FY99.

7. The Contractor provided on-time or early submission of the Progress Tracking System (PTS) performance reports to HQ throughout the year (twelve submissions). No other site has done this.
8. The Contractor has taken an active roll in anticipating the new requirements for reporting performance to HQ. This effort will allow RL to align to the new HQ system in a much more timely manner once the specifications are finalized. Their efforts in focusing the HQ development have been very positive.
9. The Hanford Site Performance Report (HSPR) was provided on time each month.
10. The contractor management is participating in an RL effort to seek ways to improve the utility and meaningfulness of the HSPR by improving the overall content and quality of the report.
11. The Contractor has initiated efforts to develop and integrate performance measures, as evidenced by the inclusion of draft performance measures, submitted for the first time, in the FY99 Multi Year Work Plans (MYWPs) and Annual Work Plans (AWPs). The Contractor also played an active role in developing the Environmental Management Near-term Performance Objectives.

Areas for Improvement

General comment: In all cases there has been positive movement throughout the year in the listed areas. From both the contract and the MYWP/AWP for Site Planning and Integration, FDH is about one year behind the initial expectation of implementing an effective management system.

1. Although complying with the HQ guidance, the narrative of the Hanford *Paths to Closure* did not provide easy-to-absorb and seamless flow of information from a strategic-level of planning to a tactical level. Also, analytical efforts and data/information from the Contractor "Projects", related to the identification of efficiencies, stretch goals and breakthroughs that would accelerate Site cleanup, declined over the year. In addition, estimates of the likelihood of success/risks were not identified.
2. The new FDH Code of Accounts is an excellent foundation for an extremely effective code of accounts structure. However, the current level of detail of the structure elements is often too high to serve as an effective cost control, cost analysis and cost-estimating tool.
3. The linkage from the baseline document, the MYWP, continues to be disconnected with regard to timeliness for upgrades and linkages among the key management documents, Integrated Site Baseline (ISB) and Project Baseline Summary (PBS), for common elements.
4. The Baseline Change Request (BCR) process was jointly agreed upon and excellent training has taken place. There is evidence that when management's attention is focused on timely completion of a given BCR, that respective BCR easily meets or exceeds the time processing requirements. However, a large majority of the BCR's do not get processed in a timely manner.
5. The Primavera (P3) scheduling system and associated ability to provide performance information from schedules (PERF module) is well behind schedule for implementation and well over cost.
6. There needs to be more progress made in linking the Systems Integration efforts to the scheduling efforts. Even though the technical database has a means to find internal and external project

interfaces within the system, these key interface points cannot currently be reflected on the summary schedules. This makes the product of little use to the project managers as well as the site analysis team.

7. Although the HSPR was provided to RL on time and the Contractor is participating in the HSPR improvement effort, the Contractor needs to take ownership of the HSPR, and accelerate implementation of the HSPR improvements to meet the October 1998, and monthly thereafter, issuance of the report in a more timely manner.
8. While the effort to develop and integrate performance measures has been initiated, the Contractor needs to espouse the intent of the Government Performance & Results Act (GPRA) and pursue the development and implementation of a "Balanced Scorecard" approach to performance measurement more aggressively.
9. More progress should be made in the Project Controls area, in the conversion of the Management Directives to Procedures.

10.2 Budget - Rating: Excellent

10.2.1 Budget Reports and Analysis

Positive Achievements

1. Request for Services (RFS) Process: FDH, including both the Finance and Contracts organizations, has worked hard with RL in FY98 to develop a new RFS process that brings both control and rigor into tracking activities under an RFS. An informative training package was developed and presented to the subcontractor organizations.
2. Analysis of Uncosted Balances: The FY97 year-end analysis of uncosted balances was received from FDH before the due date. Minor deltas between FDH and the DOE Departmental Integrated Standardized Core Accounting System (DISCAS) were discussed and understood. The thresholds established in the DOE Policy on Carryover Balances were met in all but one Control Point for FY97 and sufficient narrative justification was provided for the exception. FDH has demonstrated their commitment to control and manage uncosted balances.
3. Monitoring and Reporting Costs: FDH has done an excellent job in making sure that monthly costs are reviewed to eliminate problems prior to submittal to RL. They have taken the time to trend expenditure rates and talk with the Programs about abnormalities.
4. Monthly Budget Chief Financial Officer (CFO) Briefing: The monthly FDH briefings to the RL CFO have become an excellent forum to identify, discuss, and resolve potential and real financial and budget issues. The communication is open and honest and therefore, very effective. These briefings have been informative and are looked upon as "working group" sessions rather than one-way presentations. These are truly "teaming" sessions that have done much to improve the communication and cooperation between the contractor and RL CFO staff. FDH has done an excellent job of customizing the presentations to meet the RL CFO's needs.
5. FDH Internal Communications: The communication between FDH's CFO and Strategic Planning

and Integration organizations has improved as evidenced by active participation by both groups in the monthly CFO Briefing. This communication is critical to assure that RL management is accurately informed of the impacts of various planning assumptions and financial actions.

6. Financial Information Variance System (FIVRS) Cost Estimate Reports: Although HQ has changed timing requirements for this report, FDH has responded to requests with all appropriate information.
7. On-Site Reconciling Transfer Quarterly Estimates: FDH has been very responsive and timely with the development of estimates for transfers between on-site contractors. FDH continues to be the leader in coordination of estimates made between the contractors.
8. Funds Control: Control levels within the operating funds, Inter-DOE Work Orders, Reimbursable Orders, General Plant Project (GPP), and Construction Line Items as identified in the contract controls were not exceeded in FY 1998. The Contractor's CFO office has been diligent in analyzing the cost data before submittal to DISCAS at DOE-RL. FDH has tried to resolve any cost issues within their internal staff and sub-contractors before they become an issue for DOE-RL.
9. Certification for Availability of Funds: FDH has been responsive in meeting the 48-hour deadline for processing the certification of withdrawal of funding. The FDH CFO staff has educated their project managers on this DOE requirement and has emphasized the importance of timely certification approval.

Areas for Improvement

1. Monthly RFS Status Report: Although the monthly status reporting is good, the Contractor must expend more effort in predicting changes that need to be made to the RFS, such as changes in period of performance or movement of dollars between operating and capital equipment. Changes are usually requested by FDH after the costs have been incurred and submitted and a problem is seen on reports that show deltas in Budget and Reporting (B&R) levels. Requests for time extensions for the Inter-DOE Work Orders are not always requested early enough to prevent potential stop work situations.
2. Monitoring and Reporting Costs: The Contractor must conduct better analyses of how indirect passbacks will affect costs by Activity Data Sheets/Project Baseline Summaries (ADS/PBS) at year-end. Without this analysis, indirect passbacks could contribute to a future unexpected ADS/PBS overrun.

10.2.2 Field Budget Submission

Positive Achievements

1. Integrated Priority List (IPL) Development: FDH met the due date for the draft IPL. RL management, regulators and stakeholders easily understood the format. The Hanford Advisory Board (HAB) was particularly appreciative of the "what are we buying" document. Other noteworthy improvements in the development of the IPL included:
 - Weekly conference calls were held and minutes of the call were provided.

- Innovative use of the File Transfer Protocol (FTP) server was made this year. This new tool served to improve communication and continuity.
 - FDH did a good job in its integrating role.
2. Responsiveness: FDH has been very responsive to the myriad of “what if” exercises and requests for data. This support has allowed RL to effectively respond to requests from HQ, Congressional inquiries, regulators, stakeholders and other information requirements.
 3. Support for the Environmental Management (EM) Peer Review: The support provided to the EM Peer Review Team was outstanding. The data provided was in the form and format requested. This well-organized data served Hanford well as the EM Peer Review Team’s report confirmed RL and FDH’s position concerning regulatory drivers.
 4. Stakeholder Involvement: FDH’s support, with appropriate management presence during HAB and other public interactions, was significantly enhanced during FY98.

Areas for Improvement

1. Outlay Estimate Draft Revisions: Although FDH staff have taken the time to learn about the outlay process and the product has improved tremendously, some improvements could be made if trending or other forecasting techniques are used to analyze outlay projections and actuals.
2. Unified Field Budget Call (Unicall) Submittals: There were problems with missed deadlines and errors/discrepancies with three Unicall submissions for the FY 2000 process. These submissions were Work for Others, Information Management, and Construction Project Data Sheets. Not only were these submittals late and required rework, RL was not notified that they would be late. Responsiveness to Unicall requirements must improve.
3. IPL Development: In the next cycle, an adequate period of time for RL review of draft IPL’s needs to be provided.

10.3 Financial Management – Rating: Good

General Comment

FDH's performance significantly improved in the second half of the fiscal year. The timeliness of deliverables improved considerably and FDH worked in a more proactive manner. Corrective Action plans that were overlooked in the first half were assertively pursued and completed. While the Financial Management Division (FMD) believes that FDH's present performance is "excellent," the performance for the entire year averages at a "Good" rating.

Positive Achievements

1. Accounting System - FDH is commended for capitalizing on opportunities that presented themselves during development of the new Business Management System (BMS). FDH implemented a new Hanford Business Structure (HBS) and Code of Accounts (COA) without sacrificing the implementation of the new Hanford Data Integrator (HANDI) 2000 Financial Management and

Procurement System modules on October 1, 1998. The new Business Structure is expected to significantly improve the way Projects manage their workscope and control costs.

2. Simplify the Indirect Structure - A multi-company PHMC team successfully simplified and streamlined the indirect structure. Twenty-six of 38 service pools and over 100 rates will be eliminated in FY 2000 as a result of their analysis. The indirect budgeting process was improved to link service providers' budgets to the site's customers and their expected demands. This is expected to result in more reliable rates.
3. Accounting Practice Changes - In the second half of the fiscal year, FMD began to see improvement in FDH's controls over accounting practice changes. FDH controller staff is commended for consistently striving to improve the PHMC's compliance with accounting practice change policies and engraining discipline in the internal controls and processes.
4. Timekeeping - During FY97 and early FY98, numerous PHMC timekeeping and labor charging deficiencies were noted by RL FMD and the Defense Contract Audit Agency (DCAA). As a result, FDH placed emphasis on correcting their deficiencies. The Contractor updated its labor charging policies and procedures, and instilled a cultural change regarding the importance of proper timekeeping and labor charging through e-mail, training, and Hanford Reach articles.

Areas for Improvement

1. Special Reviews and Public Data - FDH provided data to Congressman Adam Smith that was inconsistent with earlier data. As a result, additional effort and time had to be spent reconciling the data and improving the Congressman's confidence in Hanford finances. It is imperative that PHMC presentations provide data that is accurate, in a clear, concise manner, and that is consistent with previously provided data from other sources.
2. Coordination with Budget/Planning Organizations – FDH was required to communicate significant Integrated Priority List (IPL) changes to stakeholders because of previously-provided incorrect indirect cost numbers. FDH Finance needs to carefully review all indirect cost data being used in public briefings and needs to be more involved in the budget process.

10.4 Contract Finance and Review Programs – Rating: Good

10.4.1 Internal Audits (Rating – Marginal)

Performance Summary

Internal Audit experienced significant staff turnover during the first half of the year, including the former audit director, whose resignation was effective the first week of January. The unplanned staff changes adversely impacted performance and the ability to make satisfactory progress in completing the FY98 Audit Plan. Only one of fifteen audits scheduled for the year was completed during the first six months. To mitigate the impact of the staff turnover, FDH augmented the internal audit staff with corporate staff auditors during January and February. FDH also utilized information systems audit professionals from Fluor Daniel Corporate to review and report on general and application specific controls for key information systems. This effort resulted in FDH corporate audit staff issuing 3 audit reports with

numerous findings and recommendations but the information system reviews were not part of the annual audit plan.

Positive Achievements

1. A new Internal Audit Director reported for work in March 1998 and has added staff and implemented corrective actions to increase the internal audit staff's visibility and effectiveness. The Audit Director is rebuilding the staff capabilities and emphasizing staff development and opportunities to reduce future staff turnover. The new Audit Director is also emphasizing and improving the quality of audits, reports, and work papers.
2. Fluor Daniel Corporate Information Systems (IS) Internal Audit staff completed the first General & Applications Control Review performed at Hanford. The corporate audit staff issued three audit reports as a result of that work.
3. Open items from prior audits, dating back to FY95, were investigated and closed. Twenty-six of the items have been closed to date (90%) with 4 remaining.
4. The FY99 Audit Plan has been finalized and the resources to execute the plan have been identified and are being put in place.
5. Reviews were successfully completed in the second half of the year in the areas of general counsel billings; security badge challenge review; cellular phones; accounting practice changes/sample selections. Reports were issued and a presentation of the cellular phone review observations was made to DOE.

Deficiencies

1. The planned FY98 Internal Audit Plan was only partially completed, mostly as a consequence of staff turnover and delays in recruiting and hiring qualified staff. For example: only one of fifteen audits scheduled for the year was completed during the first six months, and only 4 audits and 4 management reviews were completed by the Internal Audit Office in all of FY98

10.4.2 Repeat Audit Findings (Rating - Excellent)

Positive Achievements

1. We are not aware of any repeat Inspector General, GAO, DCAA, or DOE audit /review findings during FY98.

10.5 Procurement – Rating: Marginal

10.5.1 Balanced Scorecard (Rating - Good)

Positive Achievements

1. FDH submitted an end of year self-assessment on September 30, 1998 and provided a thorough

briefing to the RL staff. FDH's processes appear adequate and the self-assessment was a good faith effort to identify and correct problem areas. For example, FDH made several recommendations to improve its acquisition processes, from providing additional training for contract specialists, to using new contracting strategies. While FDH started the year slowly, the end of year report was a comprehensive product.

Areas for Improvement

1. FDH did not submit any quarterly self-assessment reports. While a first-quarter report was not expected because of a delay in finalizing the Performance Expectation Plan (PEP), FDH should have submitted reports for the second and third quarters. On June 19, 1998, FDH submitted only a Balanced Scorecard Self-Assessment Schedule.

10.5.2 Enterprise Companies (ENCO) Subcontract Recompete/Option Extension (Rating - Unsatisfactory)

Deficiencies

1. The expectation for receiving ENCO Recompete/Option Extension packages from FDH for RL review by January 9, 1998, was not met. At the mid-year review, FDH had submitted only two letter requests (Lockheed Martin Services, Inc. [LMSI] and Duke Engineering and Services Northwest, Inc [DESNW]) for extending the ENCO subcontracts beyond September 30, 1998. Neither request included decision packages. The process that FDH used for evaluating whether the ENCO contracts should be recompeted or extended, considered several factors and included input from cross-cutting parts of the FDH organization; however, FDH did not begin the process early enough to meet the January 9, 1998, date. Briefings were held with RL in January and February with recommendations by FDH to RL in March. As a result, definitized ENCO contracts were not in place at the beginning of FY99 for LMSI and the six Agreements that Fluor Daniel Northwest, Inc. (FDNW) has with the major subcontractors and DynCorp are still not in place because of deficiencies identified by RL. Similarly, the terms and conditions of the major subcontracts are still being negotiated while a 120-day extension has been put into place. FDH needs to better perform advance planning and follow-through on its subcontracts to have defined contracts in place prior to the date work is scheduled to begin.
2. Although two years have passed, ENCO and lower tier subcontracts have not been definitized. Numerous RL reviews of the packages have noted deficiencies in financial areas, particularly with respect to compliance with the Truth In Negotiations Act (TINA), ENCO accounting systems, and reliability of financial data.
3. A recent RL review was performed and a draft report has been shared with FDH which identifies deficiencies in cost estimating, such as:
 - FDH and the Major Subcontractors (MSCs) did not always obtain cost estimates for the task orders nor were cost estimates obtained before commencement of the work by the ENCOs. In many cases, the work was already performed and "estimates" were based on actual costs.
 - FDH has not obtained current cost or pricing data and/or proper certification from certain ENCOs, contrary to TINA requirements in the prime contract.
 - No more than 10% of the estimates had been reviewed by the buyers.
 - The Purchasing Information Documentation System (PIDS) was not updated by FDH or the

MSCs to reflect current cost estimates. PIDS only reflected budgetary information, resulting in an overstatement of commitments and a loss of control on cost overruns.

- FDH did not obtain current indirect rate information from the ENCOs. FDH has no policy or guidance as to when indirect rates should be monitored in order to update rates included in the task order agreements.
- FDH is using non-competitive fixed-price contracting for some ENCOs or some portions thereof [e.g., COGEMA and Waste Management Northwest (WMNW)].

11. PROJECT MANAGEMENT – Rating: Good

11.1 Configuration Management (CM) (Rating – Good)

General Comments

Site-wide configuration management was strengthened in FY98 through the development and approval of numerous CM procedures and baseline metrics. The two specific deliverables accomplished were the completion of the Project-specific configuration management implementation plans and the definition of a baseline and performance metrics system for essential drawing control. Both the Performance Evaluation Plan (PEP) deliverables were completed on schedule and within the established expectations. The CM plan and subsequent implementation documentation provides a sound foundation for conducting CM on the site. Full implementation will certainly improve safe and reliable operations of the Projects and their facilities. Development of the drawing control metrics is a noteworthy activity that has raised awareness of facility drawing status and has led to reductions in unincorporated changes and increased compliance to drawing requirements. The proactive approach of this metrics team, through the establishment of metric goals and periodic evaluation for new or modified metrics, will drive continuous improvement in facility baseline and essential drawing control. However, despite these positive accomplishments, configuration management continues to be deficient at Hanford. As evidenced in the third quarter Facility Evaluation Board (FEB) summary report, CM continues to be a site-wide recurring issue. Further, implementation of the CM plan within the facilities has not been accomplished consistently and success will require a continued commitment to proactively overcome CM challenges.

Positive Achievements

1. The Contractor's efforts related to the establishment of a drawing baseline and metrics associated with the baseline were excellent. The metrics team has been very proactive in establishing meaningful drawing metrics, which are evaluated periodically to achieve continuous improvement. In addition, drawing metric performance goals have been established and noteworthy improvements have been accomplished over the last two months. A similar proactive team has been established by the Contractor, to develop a vision for improvement of the effectiveness and efficiency of the site drawing system. In the area of configuration management implementation, significant improvement in consistency was achieved by the development of the configuration management Standards/Requirements Identification Document (S/RID) template and the update of the FEB performance objectives and criteria. These activities provide a consistent approach to the definition of CM requirements and the assessment of the subsequent implementation.

Areas for Improvement

1. Continued emphasis on the CM plan implementation is necessary to build upon the accomplishments to date. The site-wide CM problem solution will require a long- term commitment to achieve the desired end-state. Individual projects must continually increase personnel understanding and implementation of CM elements in all aspects of site work, to accomplish safe and reliable operation of their facilities.
2. Improvements in the area of periodic self-assessment by the Projects and FDH are needed to ensure effective implementation of configuration management across the site. These assessments must be followed by effective and timely corrective actions to enhance baseline documentation and physical configuration agreement.

11.2 Engineering and Construction Programs (Rating - Good)

Positive Achievements

1. FDH has initiated many changes to their procedures governing engineering and construction programs. Many commercial practices have been incorporated into the new procedures. The construction program has issued two new procedures replacing numerous older three-digit procedures. Other new procedures have been drafted and are under review.
2. FDH has sponsored training in commercial practices by Fluor Daniel Incorporated for the Hanford contractors and DOE.
3. In order to foster competition for A/E services and to provide for community economic development, FDH has proposed to increase the A/E pool to five A/Es. The Request For Proposals (RFP) is being reviewed in RL.
4. The Contractor completed a Value Engineering Study for Project W-178, 219-S Secondary Containment Project. Many improvements resulted from implementation of study ideas.
5. The Contractor completed construction of Project W-087, 222-S Radioactive Liquid Waste Line Replacement. This project was selected as Project of the Year by the local Project Management Institute (PMI) chapter.
6. The Contractor completed construction of Project W-059, B-Plant Canyon Ventilation Upgrade. This project completion was a key factor in the closure of B-Plant.
7. FDH assisted RL in performance of an annual assessment of the FDH Project Management System by notifying the Major Subcontractors (MSC) of the surveillance, and FDH project managers attended each of the project discussions. FDH managers also attended the planning session as well as the out briefing and provided critical feedback to the draft report. The assessment determined that a formal procedural process exists at the FDH level but there were some findings, observations and areas for improvement.
8. FDH and its MSCs reviewed their projects annually to determine if the projects are still needed and if

new projects are viable to meet their mission areas for inclusion into the Multi-Year Work Plan (MYWP).

9. Performance of Architectural and Engineering (A/E) Construction Services has been continuous through the phases of the projects without interruptions.

Areas for Improvement

1. A more consistent sitewide project management program needs to be established. Pockets of excellence exist; however, lessons are not well shared and little effort to capitalize on successes to strengthen weaker projects is evident.
2. Timely communications with RL's Project Management Division (PMD) needs improvement. Proper and timely notification of construction safety incidents to the PMD continues to be an issue. Monthly and quarterly project reporting continues to be sporadic.
3. A policy for the use of Professional Engineers and sealing of design media and other documents needs to be formulated.
4. A Metrification Program needs to be developed and implemented.
5. Project closeout needs improvement. Months after the projects are finished many charges continue to come in against the projects. Also there are delays in processing the Official Acceptance of Construction (OAC) Part III closeouts. Examples: Project L-218 was completed in January of 1998 and the project was still being invoiced as late as August 1998. Project W-252 was also completed in January 1998 and the project still has not closed out the OAC Part III.
6. Performance of the general plant and line item projects did not meet the 90 percent goal. Thirty-one of the thirty-six projects met the goal of on-time completion, within budget, and within scope as defined by the original approved project baseline, which translates to 86 %.

11.3 Site Systems Engineering (Rating: Excellent)

General Comments

The PHMC Site Systems Engineering organization, under the Site Planning and Integration (SP&I) group, provided significant leadership in furthering the application of Site Systems engineering, and specifically the integration of technical data necessary to support the mapping and planning of the Environmental Cleanup mission at Hanford.

The efforts by Site Systems Engineering materially contributed to the integration of technical information used in the preparation of site planning documents in FY98. Specific noteworthy accomplishments include the following:

Positive Achievements

1. The Contractor issued the Hanford Site Environmental Management Specification.

2. The Contractor provided integrated technical data to support FY99 Project Baseline Summary (PBS) submittals and FY99 MYWP development.
3. The Contractor maintained the Hanford Site Technical Database (HSTD) at >90% accuracy. This included a site level review of over 100 Baseline Change Requests (BCRs) for HSTD impact.
4. The Contractor ensured that the new Hanford Business Structure was integrated with the HSTD data, and that the integration of technical, schedule and cost components is at the functional (i.e. major facility) level.
5. The Contractor completed a Requirements analysis of the HSTD. The analysis included requirements from taken from the Hanford Strategic Plan (HSP), the Tri-Party Agreement (TPA), the Comprehensive Land Use Planning Environmental Impact Statement (CLUP-EIS), the PHMC Contract, and the Environmental Management (EM) Site Specification. The analysis identified gaps, and the errors and omissions were corrected through the BCR process.
6. The Contractor completed the Site Level Analysis of TWRS Facilities, SNF Facilities, WM Facilities and Facility Stabilization.

Areas for Improvement

1. Site Systems Engineering needs to focus on providing better Systems Engineering leadership to the major subprojects. This could include targeted SE training, assisting subprojects in conducting SE assessments, and development/implementation of post-assessment corrective actions to ensure an appropriate level of SE in the major subprojects.

12. HUMAN RESOURCES / CONTRACTOR WORKFORCE PROGRAMS – Rating: Superior

Positive Achievements

1. The Contractor implemented a new strategy for an employee benefits program that will save millions of dollars.
2. The Contractor developed and implemented a Worker Transition Program that will improve the utilization and effectiveness of the workforce.
3. The Contractor implemented two personnel programs; compressed 8/9s work schedule and personal time bank that serve to boost employee morale.
4. The Contractor made substantial progress in continuing efforts to put pressure on restraining the growth in medical costs. In addition, Hanford Atomic Metal Trades Council (HAMTC) representation has been included in the efforts to determine actions to control costs.
5. The Contractor's Diversity program received a "Best Practices" award.
6. The Contractor's Human Resources (HR) organization holds best practices workshops with the Major Subcontractors to improve the overall performance of HR operations.

7. The Contractor has enhanced partnering with HAMTC through weekly meetings that have successfully resolved 113 issues and achieved a significant reduction in the number of grievances.
8. The Contractor provides guidance and counsel to other site contractors, to enhance the overall quality of the site labor-management relationship.
9. The overall safety culture of the site has been improved with the assignment of a HAMTC representative to the Contractor's ES&H organization.
10. The Contractor's "Most Valuable Player" (MVP) program has been implemented for bargaining unit personnel.
11. FDH has been successful in accomplishing a number of outsourcing initiatives that involve bargaining unit members.
12. The Contractor was successful in negotiating a new collective-bargaining agreement with the Hanford Guard Union (HGU).
13. The Contractor has improved the effectiveness of the Hanford Site Stabilization Agreement by stopping "past practices" that were not part of the agreement.

Areas for Improvement

1. The Contractor needs to expand the use of performance measurement and benchmarking of the HR organization.
2. There is a need for a higher degree of HR program integration throughout the PHMC.

13. TECHNOLOGY MANAGEMENT (TM) - Rating: Good

Positive Achievements

1. Science and Technology Needs Identification: Individual contributions of FDH-Technology Management (TM) staff made this process run well, with the noteworthy inclusion of Spent Nuclear Fuels Program participation. We have already noticed improvement in FY99 for Science and Technology (S&T) needs development in producing a Compact Disc – Read Only Memory (CD-ROM) for site needs, and posting Hanford site needs on the Environmental Management (EM) Needs Management System. We have also seen an improvement in the reporting of FY 1998 Deployments in the *FY 1998 Hanford Technology Deployment Accomplishments (DOE/RL-98-79)*.
2. Technology Deployment Effectiveness: The active participation of the Spent Nuclear Fuels group in the Technology Insertion Points (TIPs) processes was a notable achievement. Participation with FDH's Site Planning and Integration (SP&I) group, to modify the change request process and setup a system to track user/project involvement, is showing positive results.
3. Infrastructure: Interfaces with the Site Technology Coordination Group (STCG) and subgroups have improved. FDH-TM has provided useful comments for several EM initiatives: Science and Technology Workshop, EM Integration, and Federal Energy Technology Center (FETC) Cost

Savings. A significant effort was expended in support of the S&T Workshop, to host and coordinate input from four major DOE sites for improvement of the EM S&T program on the national level.

Areas for Improvement

1. Science and Technology Needs Identification: It is not clear that FDH-TM is adequately supporting this process. Achievements in FY98 were primarily due to individual initiative. In addition, the results of the process need higher visibility; progress in meeting science and technology needs is not adequately reported on a monthly basis.
2. Technology Deployment Effectiveness: Most deployment fact sheets were not delivered on time (within 60 days after deployment) and many were not complete. Improvement on development of project-specific deployment plans is needed. Accelerate Site Technology Deployment (ASTD) proposal submittals from the Contractor were late, had insufficient buy-in from users, and were of poor quality. Activities such as ASTD must be addressed in a serious, professional manner with quality submittals and full user participation.

Deficiencies

1. Technology Deployment Effectiveness: The implementation of Technology Insertion Points (TIPs) into the FY98 MYWPs was not as successful as RL had hoped. FDH-TM changed the RL guidance on the TIP process, prior to passing the guidance on. This created significant confusion in the Projects as to how TIPs were to be identified. FDH did not provide timely notification to RL of issues surrounding TIPs or provide advance notice that several projects were not planning to incorporate any TIPs. It is not clear that FDH-TM adequately “assessed the technology baseline for risk and areas for baseline improvement” nor is there evidence that demonstrates results from “links made with other sites, industry, or academia to identify and implement mature technology expertise that could be imported to Hanford.” Both of these (and similar AWP activities) should be executed with high regard to the importance for improvements to the Hanford baseline. FDH-TM should aggressively play the role of middleman and matchmaker, and foster links between users and providers of technology solutions.
2. Infrastructure: Although there has been an improvement on the national level (S&T Workshop), there has been little improvement or emphasis at the local/site level. FDH needs to recognize and address barriers encountered during science and technology demonstration and deployment activities. This is called out in the AWP but it is not clear what progress has been made regarding barriers already identified by other groups such as Pacific Rim Enterprise Center and the STCG. Although FDH-TM and SP&I worked with a team to develop a definition and guidance for TIPs, FDH changed the definition in their guidance to the subcontractors. This led to confusion and made the process all the more difficult to implement. FDH notified the DOE Science and Technology Programs (STP) Division that Facility Transition would not be including any TIPs in the MYWP a couple days before the MYWP was signed. FDH-TM should have been working with their subcontractors to ensure the inclusion of TIPs and resolve issues with the subcontractors prior to submittal of the MYWP to DOE. FDH should have also raised the issue to DOE-STP to ensure timely resolution prior to MYWP signing by the DOE Assistant Manager for Facility Stabilization (AMF).
3. Hanford Tanks Initiative (HTI) Support: The contractor was very reluctant to provide DOE with information copies of documents and correspondence that have been produced under the PHMC contract. To obtain needed information, DOE requested the information from several levels of

management, and delays of days and weeks were the norm. While DOE's right to all information was not challenged, contractor management delayed delivery of requested information to the maximum extent possible, thereby impeding DOE management and staff in the execution of their assigned responsibilities. Emerging HTI issues continued to be a problem and were not brought forward until the last moment and the DOE was asked to take action immediately or suffer project delays and increased budgets.

4. Management of Annual Work Plan Scope: Management of AWP scope, schedule, and the related formal reporting, needs to be improved. Activities are being lost, falling behind, or being inadequately monitored or reported with the result of missed deadlines, substandard submittals, or insufficient information available to DOE to support decisions or coordinate related activities.

14. ECONOMIC TRANSITION – Rating: Good

Positive Achievements

1. The Contractor's Office of Economic Transition (OET) helped create 67 cumulative (FY 97-98) creditable jobs meeting the Performance Expectation Plan (PEP) criterion. This total, though shy of the 75 job target, represents a substantial achievement for the community. Additionally, OET's efforts resulted in substantial savings, which are not a part of the PEP criterion. Nevertheless, these dollar saving are very important and contribute to the "Good" rating, even though the 75 job creation target was not met.

Regarding the job creation target, there are some mitigating factors, which were considered in determining the overall rating. The 67 total would have been higher were it not for (1) setbacks to Kaiser Aluminum (The company did not get a substantial order from Boeing, out of OET's and FDH's control) and (2) a lack of "upfront" funds to pay for characterization and cleanup of excessed facilities/equipment, making them desirable and available for transfer. (Note: This lack of funds to an extent is due to transfer of some budgeted funds by FDH to other programs because of problems encountered; however, this lack was not within OET's ability to control).

2. Livingston Rebuild Center: A major locomotive repair company headquartered in Livingston, Montana, signed a lease with the Richland Operations Office (RL) for the high-bay portion of the 1171 Transportation Maintenance Building and rail yard. Livingston's Pacific Northwest satellite repair facility has resulted in 9 jobs and is projected to result in as many as 50 local, non-Hanford jobs within the next three years, reduce site mortgage costs, and generate lease revenues.
3. Kaiser Aluminum's Richland Specialty Extrusions purchased a 2750-ton extrusion press from DOE-RL, capping a yearlong effort by OET to negotiate terms for the sale. This transfer has resulted in 34 jobs and represents an estimated \$800,000 in cost avoidance to the government.
4. In preparation for commercial laboratory operations, Washington State University (WSU) completed renovation of the 3746 lab complex in the 300 Area. As a result, WSU has expanded its faculty and graduate-student employment. In addition, WSU has subleased part of the three-building facility to BioGuard Technologies, a commercial pesticide research and development firm, that was also able to create jobs as a result of the new facility. The number of jobs resulting from these actions was 6.5.

5. A major effort to enable use of U. S. Department of Energy (DOE) underutilized plant and equipment culminated in the transfer of the non-destructive evaluation scope, plus 10 Hanford workers, from DynCorp to Cogema. OET assisted in negotiating a first-of-a-kind facility license and equipment lease that will enable commercial work to be performed side-by-side with DOE work. Though the resulting non-Hanford job gain was less than one, more non-Hanford job gains are expected in the future.
6. Transfer of the 1100 Area (768 acres and 26 buildings) to the Port of Benton was completed in September 1998. FDH estimates that this effort will save DOE over \$4 million over a 10 year period.
7. Southern Rail Transfer - Over 16 miles of railroad were transferred to the Port of Benton in 1998. This allowed commercial use of the rail to support economic transition. FDH estimates that this effort will save DOE over \$2 million over a 10 year period.

Areas for Improvement:

1. OET needs to plan its work and priorities more strategically. Such planning should help in the assignment of personnel to the "higher payoff" projects.
2. OET needs to complete the development of a comprehensive list of Site assets, which could be used in the marketing of these assets. The list has been in preparation for some time and has not been made available in a timely fashion.
3. The Contractor's line management must show more commitment to economic transition goals and support the efforts of the Office of Economic Transition and the office of the FDH Vice-President, Business and Community Affairs. All of the Contractor's line management share in the responsibility for economic transition activities in support of the Hanford Strategic Plan commitment and FDH's contractual commitment to contribute to economic diversification of the region. For example, in FY98 the continued lack of funds allocated to asset conversion hampered progress in meeting the PEP job creation target.

15. SAFEGUARDS AND SECURITY (SAS) – Rating: Good

General Comments

The FDH SAS program has realized many noteworthy accomplishments during the reporting period, particularly their safety record. This indicates a sound program at the working level. The problems and deficiencies have involved a performance problem with managing the big issues, such as the nuclear material accountability system, the procurement issues surrounding the PC-AMS deliverable, coordination and communication between FDH, BWHC, and BWP concerning the nuclear material inventory problems, and management attention/emphasis on the need to diversify the Patrol Training Academy. In the last quarter of the year, FDH exhibited significantly more management attention to SAS activities, and the personal involvement of Chuck Little, FDH Vice President for Project Support, has been a major lift to the program. Much progress was made subsequent to FDH assuming responsibility back from BWP for SAS across the subcontractors, and the program is entering FY99 in a much-improved posture. The expectation is that the deficiencies noted here will be managed and resolved in FY99.

Positive Achievements

1. The six safeguards and security performance expectations due this fiscal year were completed ahead of schedule. The 1997 Hanford Site SAS Plan was a high quality document. The deployment of the Special Response Teams on the 12-hour shift was completed four weeks ahead of schedule. The deployment of the second K-9 team was thirteen weeks ahead of schedule. The expectation involving a report on explosive detectors did not contain an adequate recommendation for use at Hanford. After discussions with Fluor Daniel Hanford, Inc. (FDH) and B&W Protec, Inc. (BWP), an addendum was provided which did provide a fully satisfactory recommendation for use at Hanford. The updated SAS 2006 Plan was submitted a week ahead of schedule. Finally, the vehicle bomb Vulnerability Analysis Report (VAR) was two weeks ahead of schedule.
2. The FDH SAS program completed FY98 without a single lost workday case and in FY98 and FY97 over 1.7 million safe work hours were conducted, which is a record.
3. During FY98 a number of reviews were conducted with very positive results, e.g., Training Approval Program, Hagengruber, Firearms Safety, Law Enforcement Assistance Program, Grizzly Hitch, Curran, Joint Tactical Simulation, and Central Training Academy Shoot House.
4. Required September 1998 inventories were planned and organized more efficiently than in the recent past allowing over 95% of the inventories to be completed by FY98 year-end.
5. FDH/BWP has provided good support to the overall personnel security program. Various elements have been exceptionally well managed, such as security awareness training and the Personnel Security Assurance Programs (PSAP). The security awareness-training program has achieved an on-time completion rate in excess of 99 percent for the fiscal year. PSAP has been very well managed with both timely and accurate completion of annual program requirements.
6. The SAS function was rated highest in a safety awareness survey involving the DOE Voluntary Protection Program (VPP).
7. The Hanford Patrol's support to the "Picric Acid" incident was quick and effective.
8. BWP's management to augment the strike contingency force and develop an effective strike plan was commendable.
9. The recertification of the Hanford SAS training program after a formal evaluation by the Office of Safeguards and Security (OSS), DOE Headquarters, was outstanding.
10. FDH/BWP continues to operate a sound Information Security Program. Aggressive actions particularly in Unclassified Computer Security have ensured that site information is adequately protected.
11. FDH/BWP's corrective action program is very proactive and findings/issues are resolved in a timely manner; findings/issues are often completed prior to the submittal of a Corrective Action Plan.
12. FDH/BWP has spent much time improving the facility clearance program and has developed an excellent Foreign Ownership, Control, or Influence (FOCI) Facility Clearance tracking system.

13. FDH/BWP is commended for its forward thinking in the SAS Ten Year Plan and the time spent partnering with programs/projects to obtain realistic baseline information for the plan.
14. The Contractor's performance on the Counterintelligence program is rated as excellent. The Counterintelligence Officer for BWP resigned on very short notice with a major program impact. Both FDH and BWP management worked expeditiously and found an excellent replacement. Performance by this individual has been excellent.

Areas for Improvement

1. FDH/BWP took inappropriate actions, which resulted in the de-certification of a classified conference room. A lack of understanding of DOE requirements was evident.
2. The Patrol Training Academy diversification was not aggressively pursued by FDH/BWP until late in the fiscal year. Although FDH has become involved to compensate for BWP's under-involvement, this priority project has been extremely slow in developing.
3. Although FDH/BWP now covers all topical/subtopical areas in the internal assessment program, FDH/BWP's internal assessment reports do not provide enough detail to effectively demonstrate how the programs are performing.
4. A deviation request from DOE Orders for the protection of Special Nuclear Material (SNM) at K-Basins was received and returned for a rewrite, as the quality was inadequate. While this was a single issue, it involved a particularly significant deviation with known HQ sensitivity and interest. If not properly documented, this could have put the Spent Fuel program into a significant unbudgeted funding dilemma.
5. The FDH Classification Office, operated by BWP has provided monthly and quarterly statistical reports within the required timeframes. In March of this year, the Classification Officer resigned. A qualified replacement has not been found although a concerted effort was made. Although a person was named to act in this capacity until a qualified candidate is selected, the level of knowledge and support that can be provided to the company in the area of classification has significantly diminished.

Deficiencies

1. Notwithstanding the fact the inventories noted above are now on schedule, the delays experienced were significant, placing the Material Control and Accountability (MC&A) program into an unsatisfactory rating, and driving the entire FDH Safeguards and Security program to a 'Marginal' status. Nuclear material inventories at the Plutonium Finishing Plant were not conducted as required during most of FY98. These inventories were delayed from July 1997 to April 1998 to June 1998 and finally completed in September 1998. While FDH is now in compliance with DOE Order requirements, performance in this area was not satisfactory for most of FY98.
- 2.
2. With regard to completion of the delinquent inventories, the direct FDH presence and involvement in the oversight and management of the MC&A area is not evident. Subcontractors B&W Hanford Company (BWHC) and BWP still have communication problems and priority inconsistencies that

should be elevated to FDH for assistance and resolution. The noncompliance conditions led to a SAS survey rating of 'Marginal'.

3. An FY97 Personal Computer Alarm Monitoring System (PC-AMS) deliverable (due August 1997) still has not been met. Notwithstanding recent commitments, delays continue without substantive action or results.
4. Actions taken to resolve the FY97 HANMAS Performance Agreement continued to be delayed in FY98. Significant RL involvement from the Assistant Manager for Facility Transition (AMF) and SAS organizations was required to produce results in this matter. The DOE Savannah River (SR) LAN Material Accountability System (LANMAS) product has now been adopted for testing, but the implementation date is in late FY99, precariously close to the Year 2000. So, while the fix has been identified, it is extremely late, and remains an open issue.

16. TECHNICAL TRAINING AND QUALIFICATION – Rating: Marginal

General Comments

Fluor Daniel Hanford (FDH) made no significant progress toward Performance Expectation completion during the first half of the fiscal year. During the second half of the year FDH's self-assessment determined performance at about 70% of those expectations that could still be met. In the aggregate, the FDH performance for the entire year is determined to fall into the marginal category. However, FDH demonstrated a marked improvement after a facilitated partnering session early in April. Although FDH performance during the first half of FY'98 left a lot to be desired, their performance during the second half of the year was "good" and indications are that the trend should continue.

Positive Achievements

1. Communication and trust between FDH and OTR has improved 100% since the April facilitated meeting.
2. Although FDH failed to reach the level of the expected performance, significant progress has been made toward assuring the PHMC workforce is qualified for the work to which they are assigned. The Contractor was able to demonstrate and validate qualification of personnel for between 93% and 95% of the total workforce. However, the third tier vendors were only able to demonstrate appropriate qualifications for about 73% of the workforce. The following organizations did achieve 98% or greater: Lockheed Martin Hanford Corporation, Numatec Hanford Corporation, B&W Protec, Inc., Lockheed Martin Services, Inc., and Fluor Daniel Northwest, Inc.
3. FDH initiated new integrated training procedures for use throughout the PHMC which, if properly adhered to, will ensure that a Systematic Approach to Training (SAT) model is applied to training.
4. FDH developed a procedure for Annual Work Plan (AWP) development. If followed, the new procedure should facilitate a smoother, timely AWP process.

Areas for Improvement

1. FDH has to assume a leadership role in the development and implementation of training

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- requirements, rather than assuming the posture of being “driven”, as they did during the first part of the year.
2. FDH has been unable to complete instructor qualification development, because of the difficulty they are having in identifying all persons who provide instruction.
 3. Although FDH got a late start performing Level III evaluations, 19 were completed during FY98. The adequacy of some of the evaluations were questionable; however, RL-OTR and FDH are working together to come to mutual understanding of OTR’s expectations surrounding the Level III process.
 4. Through the process of collecting data for the Level I and II Performance Expectation requirement, it came to light that the MSCs were not developing the data consistently. FDH subsequently wrote Level I and II implementing procedures. Currently the procedures are not being followed consistently across the Project Hanford Management Contract (PHMC).

17. OFFICE OF EXTERNAL AFFAIRS (OEA) – Rating: Excellent

17.1 Support for Information to Internal and External Stakeholders (Rating – Excellent)

Positive Achievements

1. The Contractor's emergency preparedness information management performance continued to show improvement as evidenced by the January 1998 emergency involving picric acid in the 300 Area. Information flow to media outlets was generally concise, accurate, and timely. Management of the Joint Information Center was well coordinated.
2. The Contractor displayed initiative and solid support for media and/or community events targeted to publicize positive achievements at Hanford. Examples include the lease of the 1171 Building to private industry, continuing outreach involving the HAMMER Training Facility, the final closure of all coal-fired steam plants on-site, completion of the Cross-Site transfer line, and the “Lights Out” media event at B-Plant. The Contractor provided good support for dealing with the sensitive and highly visible issues surrounding the Spent Nuclear Fuel program and the State’s Notice of Intent to sue regarding single-shell waste tank stabilization.
3. The Contractor has shown marked improvement in the performance of The REACH (Hanford site newspaper) in delivering important, timely, and interesting stories to the site readership. Additionally, the Contractor's special Progress Edition of The REACH was responsive to RL's needs as well as those of the site in communicating accomplishments both on the site and off the site.

Areas for Improvement

1. Staffing for the Joint Information Center requires more attention to ensure that adequate personnel can be in place to provide communications support during emergency events.
2. Coordination between PHMC subcontractors and FDH External Affairs continues to be an area needing improvement; stronger programmatic communications and direction to major subcontractors is needed.

3. The REACH is not yet available on the Hanford Home Page on the Internet.

17.2 Support for Public Access to Hanford Site Information (Rating – Excellent)

Positive Achievements

1. The Contractor's performance in developing good relationships with stakeholders was responsive to RL's needs during the year. Responsiveness to stakeholder inquiries and information requirements was excellent and the Contractor did well in working with U. S. Department of Energy (DOE) RL in providing resources and support for the Public Involvement Program and the Hanford Advisory Board.
2. The Contractor's legal office continues to provide documents responsive to Freedom of Information Act and Privacy Act requests in a timely manner. Its searches are thorough and complete. Lockheed Martin Services, Inc. (LMSI) continues to be timely and innovative in its work for RL on the Hanford Home page.
3. The Contractor took a strong leadership role with the public regarding Hanford activities. The best example was the contamination spreads outside of controlled areas in late September. The contractor took a strong and proactive roll to keep the public, media, and employees informed. Although this was decidedly negative news, the contractor took a strong leadership role through frequent employee communications and media availabilities.

17.3 Support to Establish Priorities and Delineate Functional Responsibilities (Rating – Good)

Positive Achievements

1. The contractor generally provided timely and responsive coordination with RL-OEA. Again with the instance of the contamination spreads, the contractor coordinated employee messages and press materials with RL-OEA and other RL programmatic elements prior to their release to the employees or media. There was improvement late in the fiscal year regarding consistent and timely interaction and coordination on pending issues and media interactions.
2. The Contractor restructured the External Affairs and other public and/or outreach functions into an Office of Communications & Media Relations and an Office of Community Programs which hopefully will be able to take better advantage capabilities of its staff. Loss of two experienced External Affairs staff members in late FY 98 may create some initial FY 99 problems.

17.4 Support for Public Access to Hanford Site Information Through TPA Administrative Record, Public Information Repositories, Public Requests Service and the Internet (Rating – Superior)

Positive Achievements

1. There were over 1.1 million hits to the Hanford Internet Home Page in FY98; 7,755 new pages of information were added to our Website during the year. LMSI has exceeded expectations in timely delivery of Internet services in a professional manner. The LMSI Public Requests Service makes

available for sale, any cleared information regardless of format (hard copy, photo, video). The Service responds promptly to all requests, and is able to search databases not available to the public. It provided 426 documents to requests from the public in FY 98. When LMSI is notified of the need to update or delete information on the various Home Pages within the realm of the Hanford Home Page, their response is very timely.

18. OFFICE OF THE CHIEF COUNSEL – Rating: Excellent

Positive Achievements

1. Fluor Daniel Hanford (FDH) Legal Services attorneys provided outstanding support in the transfer of the 1100 Area to the Port of Benton.
2. FDH Legal Services coordinated environmental documents, plans and correspondence for regulatory interactions.
3. FDH has been timely in submitting its invoice letters and has developed and implemented a Litigation Invoice Review Checklist. The invoices have improved and often provide useful information regarding costs incurred by outside counsel.
4. FDH has submitted timely monthly litigation status reports and quarterly Richland Operations Office (RL) Law Reports and the quality of FDH's information has improved.
5. Bi-weekly meetings between FDH Chief Labor Counsel and RL have improved communications and RL's understanding of U. S. Department of Labor and arbitration cases.
6. FDH has been proactive in its use of Alternative Disputes Resolution (ADR).

Areas for Improvement

1. FDH legal has not secured or assigned adequate environmental staff to deal with the increasingly large number of environmental issues. FDH has issued a vacancy announcement and begun interviews.
2. FDH should continue to focus on preparing and submitting timely and detailed information regarding requests for approval of litigation settlements. FDH has drafted changes to its Litigation Management Plan to clarify its procedures for requesting approval of proposed settlements.
3. FDH needs to continue to focus on obtaining DOE-RL approval before agreeing to any litigation settlement terms.
4. FDH needs to continue to aggressively review outside counsel fees.
5. FDH needs to continue to focus on more effectively coordinating the defense of matters with Major Subcontractors.

Deficiencies

1. FDH's invention identification, disclosures and reports relating to Intellectual Property.

19. MAINTENANCE AND WORK CONTROL – Rating: Good

Positive Achievements

1. Tank Waste Remediation System (TWRS) completed the implementation of the preventive maintenance optimization (PMO) program. Implementation resulted in a reduction of approximately 1800 preventative maintenance work activities for potential cost savings of close to \$500,000 for FY98.
2. As a result of good work practices in the areas of procedures, training, work control, and lockout/tagout, there were zero TWRS lockout/tagout errors this year.
3. In Waste Management there was significant improvement in work performance as shown by the Facility Evaluation Board (FEB) scores.
4. The Contractor has been championing the incorporation of the Automated Job Hazard Analysis (AJHA) and Enhanced Work Planning (EWP) at Hanford. Several of the PHMC major subcontractors have or are implementing both EWP and AJHA at their facilities; Waste Management Federal Services of Hanford, Inc. (WMH), Babcock and Wilcox Hanford Company (BWHC), Lockheed Martin Hanford Corporation (LMHC), and Duke Engineering Services Hanford, Inc. (DESH) are working towards full implementation of AJHA and EWP at their facilities.
5. The Advanced Reactors Transition (ART) Program developed a standardization prioritization process for preventive maintenance and instrument calibration work based on risk to the facility and created a "fix-it-now" team.
6. The Fast Flux Test Facility (FFTF) piloted Work Process Improvements that included a standardized work prioritization process and the incorporation of work process improvement recommendations from the Work Process Task Team.

Areas for Improvement

1. Increase the involvement of the crafts in work package and maintenance procedure preparation. Place crafts in the position of actual maintenance procedure development and work package preparation working side by side with planners and engineers.
2. Ensure that post job reviews (as described in DOE Order 4330.4B) are conducted with all personnel involved (including crafts, health physics technician, etc) and stress the positive points as well as the lessons learned. Utilize this feedback to improve the work packages and maintenance procedures making them as flexible as possible and user friendly as possible. Minimize step-by-step procedures where possible and rely on the skill of the craft to enhance routine task performance.
3. For new facilities, increase the use of predictive maintenance activities. Optimize the balance of preventive and predictive maintenance activities at all facilities. Expand the concept of preventive maintenance optimization to organizations other than TWRS.

4. Increase craft skills enhancing their knowledge level whenever possible.

IV. OTHER SIGNIFICANT ISSUES AND EVENTS

Major Accomplishments

1. The overall PHMC sitewide safety record improvement.
2. Performance of the Facility Evaluation Board (FEB).
3. PHMC program improvements as a result of the PRF incident. Demonstrated by the picric acid event and other evaluations.
4. The PHMC teamwork on the 1100 Area Transfer to the Port of Benton and the economic diversification reutilization of Hanford facilities.
5. TWRS safety posture improvements including implementation of the Basis for Interim Operations, closure of major Unreviewed Safety Questions, and Phase I verification of the Integrated Safety Management System.

Major Deficiencies

1. PHMC overall implementation of an effective Corrective Action Management System.
2. PHMC overall implementation of sitewide criticality safety.