



Department of Energy
December 16, 2005

Mr. Ronald Gallagher
President and Chief Executive Officer
Fluor Hanford Incorporated
MSIN H5-20
P.O. Box 1000
Richland, WA 99352

EA-2005-07

Subject: Preliminary Notice of Violation and Proposed Civil Penalty - \$206,250

Dear Mr. Gallagher:

This letter refers to the recent investigation by the Department of Energy's (DOE) Office of Price-Anderson Enforcement (OE) at the Plutonium Finishing Plant (PFP) and the K-Basins. The issues at PFP involved continued poor performance with regard to compliance with criticality safety requirements over the past several years and a series of eight Technical Safety Requirement (TSR) violations that occurred over a two-year period between September 2003 and July 2005. The issues at K-Basins involved an event on November 3, 2004, in which several personnel received low level radioactive exposure during long pole tool movement and the unanticipated airborne release of radiological material on March 17, 2005, during a radioactive survey of a long pole tool.

An Investigation Summary Report describing the results of that investigation was issued to you on October 4, 2005. An Enforcement Conference was held on November 15, 2005, in Germantown, Maryland, with you and members of your staff to discuss these findings. An Enforcement Conference Summary Report is enclosed.

Based upon our evaluation of these issues and information presented by you and members of your staff during the Enforcement Conference, DOE has concluded that violations of DOE's *Nuclear Safety Management Rule*, 10 CFR 830 have occurred. The violations are described in the enclosed Preliminary Notice of Violation (PNOV).

Section I of the PNOV addresses work process violations associated with a series of eight TSR violations at PFP. Most of the TSR violations under consideration, when considered individually, were viewed as violations of administrative controls that did not present significant safety problems. However, when viewed collectively, they portray a programmatic problem at PFP in understanding and adhering to TSR requirements that represents a significant safety issue. In accordance with the *General Statement of Enforcement Policy*, 10 CFR 820, Appendix A, the work process noncompliances associated with the repetitive TSR violations discussed in the attached PNOV have

been classified as one Severity Level II problem with a base civil penalty of \$55,000. We recognize the fact that you identified the adverse trend associated with these TSR violations and upon identification reported the issue into the Noncompliance Tracking System (NTS). Based on these observations, 25 percent mitigation of the base civil penalty has been granted. In addition, we evaluated the corrective actions you have taken to address these repetitive TSR violations and the underlying causes. Based on our review of these corrective actions and the significant improvement in reducing in TSR violations at PFP over the past year, an additional 50 percent mitigation of the base civil penalty has been granted.

Section II of the PNOV addresses both work process and quality improvement violations associated with criticality safety nonconformances at the PFP. In March 1998, our office issued a PNOV citing a series of Criticality Prevention Specification (CPS) nonconformances and posting requirements that occurred in 1996 and 1997. PFP criticality safety performance since the issuance of this PNOV reflects a failure on the part of Fluor Hanford Inc., management to take appropriate steps to prevent recurrence, as evidenced by a series of NTS reports citing CPS nonconformances culminating in the issuance of NTS-RL--PHMC-PFP-2004-0010 in which 20 CPS nonconformances were identified between April and September 2004. Although many of these nonconformances are individually minor, they represent a significant programmatic weakness in the consistent implementation of criticality safety controls. In addition, five individually significant criticality safety nonconformances occurred in 2004 and 2005. In accordance with the *General Statement of Enforcement Policy*, 10 CFR 820, Appendix A, the noncompliances associated with these five CPS nonconformances discussed in the attached PNOV have been classified as one Severity Level II problem for violations related to work processes with a base civil penalty of \$55,000. We recognize that you identified the adverse trend from your internally tracked CPS nonconformance data and upon identification reported the issue into the NTS. Based on these observations 25 percent mitigation of the base civil penalty has been granted for the work process violations.

The recurring problem of criticality safety noncompliance has been determined to be an area of poor performance at PFP over the past several years. Over the past year this Office has made it clear to the contractor community that recurring poor performance in any aspect of formality of operations will be treated as a very serious problem, and that escalated enforcement action will be taken in such cases. Therefore, we have determined that the violations related to quality improvement should appropriately be categorized as a Severity Level I violation with a base civil penalty of \$110,000. Due to the longstanding (1996 - present) nature of criticality safety issues at PFP, no mitigation is deemed appropriate for corrective actions taken.

Section III of the PNOV addresses work process violations associated with the November 3, 2004, movement of long pole tools at the K-West Basin in which several personnel received low level radiological exposure. In accordance with the *General Statement of Enforcement Policy*, 10 CFR 820, Appendix A, the noncompliances

associated with this event discussed in the attached PNOV have been classified as one Severity Level II problem with a base civil penalty of \$55,000. Because of the self-disclosing nature of the event, no mitigation is provided for identification and reporting. We evaluated the corrective actions you have taken to address the work process violations. Although your critique of the event and the associated causal analysis failed to address why a more conservative approach to stop work was not exercised, we did conclude that no additional long pole tool movement issues have occurred since the event during which time approximately 300 long pole tools have been successfully processed. Based on our review of corrective actions taken and a review of recent operational history, 25 percent mitigation of the base civil penalty has been granted.

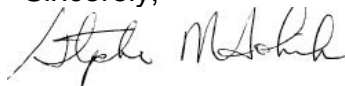
With regard to the March 17, 2005, K-East long pole survey event, I have chosen to exercise enforcement discretion and forego any enforcement action, given the motivation of the Health Physics Technician in taking the survey, the personal protective equipment being worn at the time the event, and the actions taken since the event to prevent recurrence. However, the failure to fully apply As Low As Reasonably Achievable practices during the long pole tool radiological survey and the subsequent recovery should be further evaluated to seek opportunities for improvement in future related activities at the K-Basins.

Recent operational history at PFP and the Spent Nuclear Fuels facilities suggest weakness in your adherence to established procedures and conduct of operations in general. Corrective actions directed at specific events or issues are important but are not deemed totally sufficient to address broad programmatic conduct of operations concerns. We encourage you to undertake action directed at long term improvements in your formality of operations to include those directed at enhancing the nuclear safety mindset of your nuclear operations personnel.

You are required to respond to this letter and to follow the instructions specified in the enclosed PNOV when preparing your response. Your response should document any additional specific actions taken to date. Corrective actions will be tracked in the reports filed in the NTS. You should enter into the NTS (1) any additional actions you plan to take to prevent recurrence and (2) the target completion dates of such actions.

After reviewing your response to the PNOV, including your proposed corrective actions entered into the NTS, DOE will determine whether further enforcement action is necessary to ensure compliance with DOE nuclear safety requirements. DOE will continue to monitor completion of corrective actions until these matters are resolved.

Sincerely,



Stephen M. Sohinki

Director

Office of Price-Anderson Enforcement

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Enclosures:
Preliminary Notice of Violation
Enforcement Conference Summary
List of Attendees

cc: J. Shaw, EH-1
R. Shearer, EH-1
A. Patterson, EH-1
M. Zacchero, EH-1
A. Rankin, EH-1
L. Young, EH-1
R. Day, EH-6
Docket Clerk, EH-6
B. Loesch, EH-31
R. Lagdon, S-3
J. Rispoli, EM-1
L. Vaughan, EM PAAA Coordinator
K. Klein, DOE-RL
S. Hahn, DOE-RL PAAA Coordinator
A. Acton, IG-33
L. Nye, FHI PAAA Coordinator
R. Azzaro, DNFSB

**Preliminary Notice of Violation
and
Proposed Imposition of Civil Penalty**

Fluor Hanford Incorporated (FHI)
Plutonium Finishing Plant and K-West Basin

EA-2005-07

As a result of a Department of Energy's (DOE) evaluation of operational issues at the Plutonium Finishing Plant (PFP) and K-West Basins, multiple violations of DOE nuclear safety requirements were identified. The issues included a series of eight Technical Safety Requirement (TSR) violations that occurred at PFP between September 2003 and July 2005, five Criticality Prevention Specifications (CPS) nonconformances that occurred at PFP between April 2004 and July 2005, repeated poor performance in complying with criticality safety requirements over the past several years, and a November 3, 2004, personnel radiological exposure event during long pole tool movement at the K-West Basin.

In accordance with 10 CFR 820, Appendix A, *General Statement of Enforcement Policy*, the violations are listed below. Citations specifically citing the quality assurance criteria of 10 CFR 830.122 represent a violation of 830.121(a), which requires compliance with those criteria.

I. Work Process Violations Identified During the Investigation of a Series of Eight TSR Violations at PFP

10 CFR 830.122(e)(1) requires that contractors perform work "consistent with technical standards, administrative controls, and other hazard controls adopted to meet regulatory or contract requirements, using approved instructions, procedures, or other appropriate means."

Contrary to the above, personnel working in PFP failed to perform work consistent with requirements stated in facility specific TSRs over the period September 2003 through July 2005. These TSR violations included the following:

- A. PFP TSR limiting condition of operation (LCO) 3.2.4.2 requires a fire surveillance to be established and maintained while the fire protection system is determined to be inoperable. On September 17, 2003, the fire protection system was declared inoperable and LCO 3.2.4.2 was entered. However, the fire surveillance was lifted while the LCO condition was still in effect.

- B. PFP TSR LCO 3.0.5 allows the ventilation system to be temporarily placed into service for the purpose of leak testing but requires administrative controls to be in place until the testing is complete and the system declared operable. However, on November 14, 2003, it was discovered the ventilation system had been placed back in service before completion of the required leak test and operability determination and without required administrative controls in place.
- C. PFP TSR LCO 3.2.2 requires that alternate monitoring be established in the stack within two hours of the discovery of a failure of the stack monitoring system. However, on April 1, 2004, alternate monitoring was not established within the two hours following failure of the stack monitoring system.
- D. PFP TSR LCO 3.2.4.2 requires the establishment of a fire surveillance during the annual functional testing of the Radio Fire Alarm Reporter (RFAR) until operability of the RFAR is reestablished. However, on May 4, 2004, during annual testing of the RFAR, the fire surveillance was established in a different location than that stated in the work instruction, resulting in a violation of LCO 3.2.4.2.
- E. PFP TSR LCO 3.1.2 restricts fissile material movements while the Criticality Alarm Panel (CAP) is not in operable status. However, on July 7, 2004, while the CAP was set in an inhibit mode rendering it inoperable, the restriction of fissile material movements was lifted.
- F. As a compensatory action related to modification of the PFP fire protection system, hot work was restricted per PFP TSR LCO 3.4.1.1 in rooms 192 and 192A. However, on August 27, 2004, the hot work restriction was lifted prior to establishing operability of the fire protection system in PFP rooms 192 and 194A.
- G. PFP TSR LCO 3.1.2 establishes limits for the CAP backup battery specific gravity for determination of operability. However, on September 29, 2004, an FHI manager declared the CAP backup battery to be operable despite a specific gravity reading below that established in TSR LCO 3.1.2.
- H. PFP TSR LCO 3.1.2 restricts fissile material movements while the CAP is not in operable status. However, on July 20, 2005, a fissile material calibration source was moved while the LCO material movement restriction was in effect and prior to the CAP being declared operable.

Collectively, these violations constitute a Severity Level II problem.
Civil Penalty - \$13,750

II. Work Process Violations Identified During the Investigation of a Series of 20 Criticality Prevent Specification Nonconformances at PFP

10 CFR 830.122(e)(1) requires that contractors perform work “consistent with technical standards, administrative controls, and other hazard controls adopted to meet regulatory or contract requirements, using approved instructions, procedures, or other appropriate means.”

FHI procedure HNF-7098, Chapter 5, *Criticality Safety Program*, section 2.0, revision 5, dated 3/24/04 states "CPSs shall be used at all fissionable material facilities."

PFP procedure FSP-PFP-5-8, Volume 1, Chapter 3.3, *Criticality Safety*, section 3.1.2, Revision 18, Change 1, dated 2/12/04 states that operations and laboratory management are responsible for "Ensuring fissionable material is handled, transported, and stored in accordance with Criticality Prevention Specification (CPS)."

Contrary to the above, personnel working in PFP failed to perform work consistent with requirements stated in CPSs over the period April 2004 through September 2004. Five of the more significant criticality safety issues, involving ten CPS nonconformances, including two that occurred in 2005 are discussed below:

- A. HNF-15502 R1C, LCO 3.0.5 states that equipment removed from service or declared inoperable may be returned to service under administrative control solely to perform testing required to demonstrate operability. However, in April 2004, it was discovered that CPS-Z-165-80435 had been approved with a scope that allowed material that was not for the purpose of operability testing to be added to glovebox HA-7A, after this glovebox was removed from service by being placed in an inactive status
- B. CPS-Z-165-80100, section 3.2, states that "Minimum spacing between two storage arrays or an array and more than 100 grams of fissile material (including through non-isolating walls) is 3 feet (92 cm)." However, on July 7, 2004, during a routing inspection, a 55-gallon drum was discovered to be located less than 36 inches from glovebox HC-12S.
- C. CPS-Z-165-80100, section 3.2, states that "Minimum spacing between two storage arrays or an array and more than 100 grams of fissile material (including through non-isolating walls) is 3 feet (92 cm)." However, in correcting the noncompliance in B above, the same drum was relocated near a non-isolating wall in room 228B that placed it less than the required 3 feet from glovebox HC-11 in the adjacent room 228A.
- D. PFP procedure FSP-PFP-5-8, Volume 1, Chapter 3.10, *Recovery Plans*, section 5.7, Revision 7, Change 1, dated 11/6/03 states that "For criticality nonconformances, only after the verification has been signed can the operation be restarted." However, the recovery plan associated with the movement of the 55 gallon drum discussed in C above did not have the required verification review prior to implementation of the recovery plan.
- E. Criticality Safety Evaluation Report 04-018 associated with CPS-Z-165-80440 specifies mass limits for three levels within glovebox HA-9A. However, due to a non-destructive assay calculation error discovered on September 9, 2004, the corrected fissile material mass value was higher than the limits allowed by the CPS,

resulting in an overbatch condition within the glovebox and the associated violation of CPS-Z-165-80440.

- F. FHI procedure HNF-7098, Chapter 6, *Criticality Safety Postings*, section 3.2, revision 5, dated 3/24/04 states that, "Each supervisor shall require conformance with good safety practices including unambiguous identification of fissile materials and good housekeeping. [ANSI/ANS-8.19, 5.6](V) An inventory sheet, list or logbook shall be maintained if a current inventory is required to provide tracking and verification of material for criticality safety compliance. The responsible person, usually the person making the transfer, shall promptly update the inventory (e.g., initial the inventory sheets). [ANSI/ANS-8.19, 9.5](I)." However, on October 6, 2004, it was discovered that although calculations identified hold-up values of fissile material in a calciner and flourinator, located inside the glovebox, that had been included in the CPS, the fissile material had not been added to the glovebox inventory and tracked as required by HNF-7098.
- G. CPS-L-114-00020 limits the mass in glovebox 179-9 to 250 grams. However, on June 15, 2005, a poly jar was placed into glovebox 179-9 that exceeded the allowable CPS mass limit. The safeguards value had been used to determine the acceptability of placing a poly-jar into the glovebox rather than the total fissile mass limit.
- H. CPS-Z-165-80100, section 3.8, states that "Type 1 ITCs [Isolated Transport Containers] must be spaced minimum 36 inches edge-to-edge from other fissile material containers greater than 100 grams of plutonium." However, on July 19, 2005, three of ITCs in room 42 were determined to be from wet processes (Type 1 ITC) and were discovered spaced less than the 36 inches required by the CPS.
- I. ZSP-002, *Moving Fissile Material*, section 2.1.5, states that "If an ITC meets the requirements for Type 1A or 1B per CSP-Z-165-80100 then apply a Type I ITC label." However, on July 19, 2005, three type 1A ITCs were discovered that were not labeled with the required Type 1 ITC label.
- J. ZO-200-518, *Applying Nuclear Material Labels*, states requirements for the labeling of both assayed and un-assayed ITCs. However, on July 19, 2005, 11 ITCs in room 42 were discovered incorrectly labeled with a presumed fissile material mass values that were not supported by nondestructive assay determination.

Collectively, these violations constitute a Severity Level II Problem.
Civil Penalty - \$41,250

III. Quality Improvement Violation Identified During the Investigation of a Series of 20 Criticality Prevention Specification Nonconformances at PFP

10 CFR 830.122 (c) requires that the contractor "... (1) Establish and implement processes to detect and prevent quality problems. (2) Identify, control, and correct

items, services, and processes that do not meet established requirements. (3) Identify the causes of problems and work to prevent recurrence as a part of correcting the problem.”

Contrary to the above, PFP’s processes to identify causes and correct quality problems were not effectively established and implemented.

The DOE investigation into the criticality safety nonconformances at PFP identified longstanding recurrent weaknesses in adherence to criticality safety controls and requirements, indicating ineffectiveness in the PFP corrective action management process in preventing recurrence of CPS nonconformances. A summary of the longstanding nature of this problem at PFP is provided below:

- OE investigated criticality safety deficiencies at PFP and issued an enforcement action, EA-98-02, in March 1998. This investigation identified that a series of nonconformances with CPSs and posting requirements had occurred in 1996 and 1997.
- In April 2001, FHI reported in NTS-RL-PHMC-PFP- 2001-0002 that another series of six significant criticality safety nonconformances had occurred at PFP. These deficiencies again represented violations of CPS and posting requirements.
- In February 2003, FHI reported in NTS-RL-PHMC-PFP-2003-002 that repetitive criticality safety nonconformances had occurred at PFP. In this report, FHI identified that 15 events had occurred, between November 2002 and February 2003, which involved nonconformances with criticality procedures and posting requirements.
- In October 2003, the DOE Office of Environmental Management issued a report of their assessment of the Fluor criticality safety program at PFP. This report identified that the causal analysis process used in evaluating the 15 events reported in NTS-RL-PHMC-PFP-2003-002 focused on only the apparent causes and did not demonstrate an understanding of the underlying causes.
- In October 2004, FHI reported, in NTS-RL-PHMC-PFP-2004-0010 another series of 20 repetitive criticality safety nonconformances that occurred between April and September 2004, at PFP.
- “Two significant events occurred in June and July of 2005, previously described in Section II G-J of this PNOV, involving inadequate conduct of operations and nonconformances with criticality safety procedures and posting requirements.

Collectively, these violations constitute a Severity Level I problem.
Civil Penalty - \$110,000

IV. Work Process Violations Identified During the Investigation of the Personnel Exposure Event During Long Pole Tool Movement at the K-West Basin

10 CFR 830.122(e)(1) requires that contractors perform work “consistent with technical standards, administrative controls, and other hazard controls adopted to meet regulatory or contract requirements, using approved instructions, procedures, or other appropriate means.”

Contrary to the above, on November 3, 2004, K-West Basin personnel performing and supporting preparatory work needed prior to West Secondary Process Table long pole tool removal and East Secondary Process Table stadium light relamping failed to perform work consistent with established requirements. Specific work process violations included the following:

- A. RWP L-040, revision 1, *Relocation, Removal and Cutting of Long Handled Tools from Basin Water, Staging Canister Lids and Debris for Later Removal*, in effect on November 3, 2004, requires that a Health Physics Technician (HPT) perform pre and post radiological surveys of long handled tools used for material relocation. However, long pole tools were moved by the Nuclear and Chemical Operators (NCO) without the HPTs first performing a radiological survey of the long pole tools.
- B. RWP L-040, revision 1, *Relocation, Removal and Cutting of Long Handled Tools from Basin Water, Staging Canister Lids and Debris for Later Removal*, in effect on November 3, 2004, requires that air sampling take place during underwater material relocation activities. However, long pole tools were moved by the NCOs without HPTs taking the required air samples.
- C. Work Document 1K-04-08245, *105KW, Remove Long Handle Tools From Basin*, in effect at the time of the event, is the primary work instruction to control work activities associated with long pole removal from the basin. On November 3, 2004, workers were assigned responsibility for preparing the West Secondary Process Table prior to long pole tool removal. However, the work instruction is silent on how this work was to be done and failed to alert workers that long poles must first be surveyed prior to movement.
- D. The FHI *Quality Assurance Program Description*, HNF-MP-599, Section 5.0, Work Processes, requires that FHI management ensure that work is completed in accordance with applicable requirements. HNF-GD-14047, *Pre-Job Briefing and Post-Job Review Guide*, revision 3, section 3.2(4), dated June 16, 2004, states “The PIC/FWS should attempt to use a location that does not provide distraction to the pre-job briefing process.” Section 3.2(5) of the *Pre-Job Briefing and Post-Job Review Guide* states that the “PIC/FWS, assigns the work task to employees.” Section 3.2 of the *Pre-Job Briefing and Post-Job Review Guide* states, “The pre-job briefing process communicates to the workers the scope of the work, the hazards and requirements, and the controls to implement all Integrated Environment, Safety and Health Management System (ISMS) core functions.” However, FHI

management conducting the pre-job failed to (1) adequately communicate to the workers the scope and limitations of the job, (2) assure that all personnel involved in the job evolution remained for the entire briefing, (3) ensure that the briefing was conducted in an area in which background noise and other distractions were minimized, and (4) ensure that all personnel were assigned job responsibilities prior to completion of the briefing.

E. HNF-5173, *Radiological Control Manual*, revision 3, chapter 3, part 4, section 344, states "Any worker has the authority and responsibility to stop radiological work activities for any of the following reasons:

- (1) Inadequate radiological controls;
- (2) Radiological controls not being implemented;
- (3) Radiological Control Hold Point not being satisfied."

However, HPTs did not instruct the workers to stop work and leave the area, rather allowing them to complete their assigned preparatory work (an additional 1.5 hours in the work area without benefit of respiratory protection) even though the possibility of airborne radiological material was present and radiological controls, as stipulated in the RWP, were not being implemented.

Collectively, these violations constitute a Severity Level II Problem.

Civil Penalty - \$41,250

Pursuant to the provisions of 10 CFR 820.24, FHI is hereby required within 30 days of the date of this Preliminary Notice of Violation (PNOV), to submit a written reply to the PNOV by overnight carrier to the Director, Office of Price-Anderson Enforcement, Attention: Office of the Docketing Clerk, EH-6, 270 Corporate Square Building, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874-12190. Copies should also be sent to the Manager of the DOE Richland Operations Office and to the Assistant Secretary for Environmental Management. This reply should be clearly marked as a "Reply to a Preliminary Notice of Violation" and should include the following for each violation: (1) admission or denial of the alleged violations; (2) any facts set forth which are viewed by FHI to not be correct; and (3) the reasons for the violations if admitted, or if denied, the basis for the denial. Corrective actions that have been or will be taken to avoid further violations shall be delineated with target and completion dates in DOE's Noncompliance Tracking System. In the event the violations set forth in this PNOV are admitted, this Notice will constitute a Final Order in compliance with the requirements of 10 CFR 820.24.

Any request for remission or further mitigation of civil penalty must be accompanied by a substantive justification demonstrating extenuating circumstances or other reasons why the assessed penalty should not be paid in full. Within 30 days after the issuance of the PNOV and civil penalty, unless the violations are denied, or remission or additional mitigation is requested, FHI shall pay the civil penalty of \$206,250 imposed under section 234a of the Act by check, draft, or money order payable to the Treasurer

of the United States (Account 891099) mailed to the Director, Office of Price-Anderson Enforcement, Attention: Office of the Docketing Clerk, at one of the above addresses. If FHI should fail to answer within the time specified, the contractor will be issued an order imposing the civil penalty. Should additional mitigation of the proposed civil penalty be requested, FHI should address the adjustment factors described in section IX of 10 CFR 820, Appendix A.



Stephen M. Sohinki
Director
Office of Price-Anderson Enforcement

Dated at Washington, DC,
this 16th day of December 2005

Enforcement Conference Summary

Plutonium Finishing Plant Technical Safety Requirement Criticality Safety Issues, and K-West Basin Long Pole Tool Removal Event

On November 15, 2005, the Department of Energy's Office of Price-Anderson Enforcement (OE) held an Enforcement Conference with Fluor Hanford Incorporated (FHI), in Germantown Maryland. The meeting was called to discuss the facts, circumstances, and corrective actions pertaining to a series of repetitive Technical Safety Requirement (TSR) violations and Criticality Prevention Specification (CPS) nonconformances at PFP as well as two events at the K Basins involving long pole tools. Mr. Stephen Sohinki, Director of the Office of Price-Anderson Enforcement, called the meeting to order. Mr. Sohinki stated that OE had convened the meeting to (1) address the issues discussed in the October 4, 2005, Investigation Summary Report, (2) discuss corrective actions taken to prevent recurrence, and (3) discuss mitigation factors for OE consideration. Information and key areas discussed at the conference are summarized below. Material provided by FHI during the conference was incorporated into the docket.

Mr. Ron Gallagher, FHI President and Chief Executive Office, began the FHI presentation by providing examples of several initiatives undertaken by FHI aimed at improving its safety performance. Examples discussed included the development of leading performance indicators in preventing adverse event occurrence, the use of the ALARA center to focus on radiation safety improvement, and recent efforts undertaken to strengthen the FHI management team. Mr. Gallagher cited recent improvements in Occupational Safety and Health statistics and conduct of operations as evidence suggesting that safety initiatives are showing results. Mr. Gallagher stated that the issues under consideration are viewed by FHI as serious. Ms. Donna Busche, Vice President, Regulatory Compliance, presented an overview of common themes within the issues under consideration. Ms. Busche discussed identification of potential noncompliances and recognition of adverse trends to identify repetitive and programmatic issues, continuous improvement through improvement in causal analysis and extent of condition reviews, and actions taken to improve existing processes to include (1) a risk ranking of issues/events, (2) examining commonality of issues through a cooperative approach with the DOE Richland Operations Office, and (3) using a scorecard approach to assure that FHI senior management get the operational data they need. Mr. Bruce Klos, Vice President, PFP Closure Project, discussed both the PFP TSR violations and CPS nonconformances. Mr. Klos provided an overview of the issues, the associated casual analyses and corrective actions identified and

implemented. Mr. Klos also addressed actions taken to improve conduct of operations and criticality safety at PFP. Improvements discussed included (1) formalizing the criticality issue trending process, (2) additional training provided to PFP fissile material handlers and managers on conduct of operations (3) instituting a Senior Supervisory Watch for fissile move activities, (4) mentoring personnel involved in providing pre-job briefs, and (5) establishing a conduct of operations center of excellence at PFP. Mr. Peter Knollmeyer, Vice President, K Basin Closure Project, discussed the long pole tool events at both the K-West and K-East Basins. Mr. Knollmeyer provided an overview of both events to include a discussion of corrective actions taken and specifically those corrective actions taken to address conduct of operations deficiencies at the K-Basins. Some the improvement initiatives Mr. Knollmeyer specifically addressed included (1) an operations stand down taken one day each calendar quarter to discuss safety and conduct of operations, (2) scheduling a sampling of completed jobs for a post-job debrief, and (3) a review of all DOE Richland Operations Office OA reports. Mr. Knollmeyer noted that (1) no operational events associated with long pole tool movement have occurred since the events under considerations occurred (approximately 280 tools removed), (2) performance improvements have been observed since implementation of post-job briefs, and (3) only one delinquent corrective action has been identified in 2005. In addition, Mr. Knollmeyer presented asserted factual inaccuracies associated with the October 4, 2005, OE Investigation Summary Report. OE stated that the FHI statement on factual inaccuracy would be added to the Docket. Ms. Busche presented mitigation factors for OE consideration. These included (1) PFP TSR violations and CPS nonconformances were self-identified trends and reported in a timely manner, (2) root cause analyses were performed and corrective actions were identified and implemented, and (3) FHI had identified the need to define a more rigorous process in performing apparent cause versus root cause analysis. Mr. Gallagher closed the FHI presentation by reviewing commitments made at the conference and soliciting any further questions.

Mr. Sohinki stated that OE would consider the information presented by FHI together with the entire record when OE undertakes its enforcement deliberations. Mr. Sohinki then adjourned the conference.

November 15, 2005

**Plutonium Finishing Plant Technical Safety Requirement
Criticality Safety Issues, and
K-West Basin Long Pole Tool Removal Event**

Enforcement Conference List of Attendees

DOE – Office of Price-Anderson Enforcement

Stephen M. Sohinki, Presiding Officer
Howard Wilchins, Senior Litigator
Richard Day, Senior Enforcement Specialist
Steven Hosford, Technical Advisor

DOE – Office of Environmental Management

Craig Scott, EM-5

DOE – Richland Operations Office

Matthew McCormick, Assistant Manager for Central Plateau
Sheila Hahn, PAAA Coordinator

Fluor Hanford Incorporated

Ron Gallagher, President and Chief Executive Officer
Donna Busche, Vice President, Regulatory Compliance
Bruce Klos, Vice President, Plutonium Finishing Plant Closure Project
Peter, Knollmeyer, Vice President, K Basin Closure Project
Lynn Nye, Manager, Nuclear Safety Regulatory Compliance
Dan Arrigoni, Director, KBC Closure Support
Connie Simiele, Director, PFP Environmental, Safety and Health, Quality Assurance
Tulanda Brown, Regulatory Compliance