



U.S. Department of Energy  
**Office of River Protection**

P.O. Box 450  
Richland, Washington 99352

04-ESQ-059

Mr. E. S. Aromi, President  
and General Manager  
CH2M HILL Hanford Group, Inc.  
Richland, Washington 99352

Dear Mr. Aromi:

CONTRACT NO. DE-AC27-99RL14047 – ASSESSMENT REPORT A-04-ESQ-TANKFARM-007 – DOCUMENTS, RECORDS, AND WORK PROCESSES, JUNE 15 - 24, 2004

This letter forwards the results of the U.S. Department of Energy, Office of River Protection (ORP) assessment of the CH2M HILL Hanford Group, Inc. (CH2M HILL) Documents, Records, and Work Processes Quality Assurance (QA) Program conducted during the period of June 15 - 24, 2004.

The assessment team concluded the CH2M HILL Documents, Records, and Work Processes QA Program was adequate and in conformance with established requirements as identified in TFC-PLN-02, Revision A-3, "Quality Assurance Program Description." Overall, the team found implementation of program elements effective in the areas of CH2M HILL's control of documents and records; handling, storage, and shipping; control of measuring and test equipment; special processes (welding and non-destructive examination); and sample control.

However, the team concluded the document control process implemented by subcontractor Lockheed Martin Information Technology (LMIT) was not effective. There was one Finding (Attachment 1) for LMIT not following procedures for the updating of controlled print files. There were four assessment follow-up items involving LMIT document control procedures, flowdown of requirements, database entry training, and internal data entry control issues.

The verification of effectiveness of CH2M HILL's corrective actions to ORP's 2003 assessment will be tracked as an assessment follow-up item because CH2M HILL has not completed its End Point Assessment, which is scheduled for completion by August 30, 2004.

The assessment report (Attachment 2) is attached.

Within 30 days of receipt of this letter, please respond to the Findings and include the corrective action management plan indicating the identified causes and corrective actions identified to resolve the program deficiencies discussed in the attached report. The plan should include actions and completion dates.

Mr. E. S. Aromi  
04-ESQ-059

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If you have any questions, please contact me, or your staff may call Robert C. Barr, Director, Office of Environmental Safety and Quality, (509) 376-7851.

Sincerely,

ESQ:PRH

Roy J. Schepens  
Manager

Attachments: (2)

1. Notice of Finding
2. Assessment Report

cc w/attachs:

H. M. Hassell, CH2M HILL  
M. L. McElroy, CH2M HILL  
K. M. Vadlamani, RL

U.S. DEPARTMENT OF ENERGY  
Office of River Protection

ASSESSMENT: Tank Farm Contractor Documents, Records, and Work Processes

REPORT: A-04-ESQ-TANKFARM-007

FACILITY: CH2M HILL Hanford Group, Inc.

LOCATION: 2750 Bldg., 200 Area

DATES: June 15 through 24, 2004

ASSESSORS: Paul R. Hernandez, Lead Assessor  
Jim Adams, Assessor  
Krishna Vadlamani, Assessor

APPROVED BY: Pat Carier, Verification and Confirmation Official,  
Environmental Safety and Quality Division

## **EXECUTIVE SUMMARY**

### Tank Farm Contractor Documents, Records, and Work Processes

#### **INTRODUCTION**

From June 15 – 24, 2004, the U.S. Department of Energy, Office of River Protection (ORP) conducted an assessment of the CH2M HILL Hanford Group, Inc. (CH2M HILL) Documents, Records, and Work Process Quality Assurance Program. The assessment focused on determining the effectiveness of CH2M HILL's processes for control of documents and records; handling, storage, and shipping; measuring and test equipment (M&TE); and special processes activities within the Tank Farm contractor's scope of work. This assessment was based on the requirements set forth in the contractor's Quality Assurance Program Description (QAPD). Assessment activities included verifying CH2M HILL implementation of associated procedures and processes, reviewing objective evidence demonstrating completion of process activities, observing activities being performed, and interviewing key personnel responsible for accomplishing process activities.

This assessment of CH2M HILL covered the following specific areas:

- Documents and Records;
- Work Processes;
- Special Processes;
- Identification and Control of Items;
- Handling, Storage, and Shipping;
- Control of M&TE; and
- Sample Control.

The assessors concluded that, notwithstanding Finding A-04-ESQ-TANKFARM-007-F01 and five Assessment Follow-up Items, A-04-ESQ-TANKFARM-007-A01 through A-04-ESQ-TANKFARM-007-A05, CH2M HILL had established and effectively implemented processes for controlling documents, records, and work processes.

## **SIGNIFICANT OBSERVATIONS AND CONCLUSIONS**

### —Overall Effectiveness of Procedures

The assessors reviewed CH2M HILL's procedures for control of documents and records; handling, storage, and shipping; M&TE; special processes (welding and non-destructive examination [NDE]); and sample control. The assessors confirmed these procedures contained the requirements of the CH2M HILL "Quality Assurance Program Description," TFC-PLN-02, Revision A-3, and were adequately implemented.

### Documents and Records

The CH2M HILL system for generation and approval of documents was adequate. Documents and current document changes were available to workers who needed them. However, the assessors identified one Finding.

Finding A-04-ESQ-TANKFARM-007-F01 identifies a condition in which the Lockheed Martin Information Technology document control organization did not follow procedures for updating controlled print files. The assessment team found incorrect postings to eight controlled prints at the 242 Evaporator control room.

### Work Processes (Planning)

The assessors found CH2M HILL activities in the area of work planning processes were undergoing improvement as a result of issues identified by internal assessments. It was agreed that ORP would defer their assessment of this subject area to provide the contractor time to implement their improvement initiatives. An End Point assessment is scheduled for August 2004.

### Special Processes

The assessors concluded the CH2M HILL processes for controlling the welding and non-destructive examination (NDE) special processes were effective. This included the welding and NDE programs of CH2M HILL's sub-contractors. The assessors did not identify any concerns or issues with welding or NDE.

### Identification and Control of Items

Items used in construction and maintenance of Tank Farms facilities and equipment were adequately identified and status of the items was maintained.

### Handling, Storage, and Shipping

CH2M HILL provided an appropriate set of procedures to implement the handling, storage, and shipping requirements of the QAPD. The assessors identified no handling, storage, or shipping issues.

### Control of M&TE

The assessors determined control of M&TE was performed in accordance with requirements, following the consolidation of several distribution points into one central location.

### Sample Control

CH2M HILL properly controlled the process for maintaining identification and control of waste tank samples. Chain of custody was maintained and sample data was managed in accordance with CH2M HILL requirements.

## TANK FARM CONTRACTOR DOCUMENTS, RECORDS, AND WORK PROCESSES

### 1.1 Assessment Purpose and Scope

During the period of June 15 – 24, 2004, the U.S. Department of Energy (DOE), Office of River Protection (ORP) performed an assessment of the CH2M HILL Hanford Group, Inc. (CH2M HILL) Documents, Records, and Work Process QA Program. The assessment focused on determining the effectiveness of CH2M HILL's processes for control of documents and records; handling, storage, and shipping; control of measuring and test equipment (M&TE); and special processes activities within the Tank Farm contractor's scope of work. In accordance with the River Protection Project Tank Farm Contract,<sup>1</sup> CH2M HILL must comply with the accepted and approved "Quality Assurance Program Description," TFC-PLN-02, Revision A-3. This assessment was based on the requirements set forth in the contractor's Quality Assurance Program Description (QAPD).

Assessment activities included verifying CH2M HILL and their subcontractor's implementation of associated procedures and processes, reviewing objective evidence demonstrating completion of process activities, observing activities being performed, and interviewing key personnel responsible for accomplishing process activities.

This assessment of CH2M HILL covered the following specific areas:

- Documents and Records;
- Work Processes;
- Special Processes;
- Identification and Control of Items;
- Handling, Storage, and Shipping;
- Control of M&TE; and
- Sample Control.

The assessors reviewed CH2M HILL's processes for control of documents, records, and work processes to determine if they complied with the commitments in the QAPD and the related implementing procedures. The assessment team paid special attention to issues from previous assessments, including issues identified by CH2M HILL. Where CH2M HILL was still

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<sup>1</sup> Contract No. DE-AC27-99RL14047 between the U.S. Department of Energy and CH2M HILL Hanford Group, Inc, dated September 30, 1999.

resolving issues, the assessment team avoided evaluating activities affected by ongoing corrective actions. The onsite review was conducted from June 15 – 24, 2004. An exit meeting was conducted on June 25, 2004.

## **Significant Observations and Conclusions**

### **Overall Conclusion**

The assessment team found the CH2M HILL Documents, Records, and Work Processes programs were adequate and in accordance with established requirements as identified in TFC-PLN-02, Revision A-3, “Quality Assurance Program Description.” Overall, implementation of program elements was determined effective in the areas of control of documents and records; handling, storage, and shipping; M&TE; special processes (welding and non-destructive examination [NDE]); and sample control, with the exceptions as noted.

The assessment identified one Finding and five assessment follow-up items (AFI). These were as follows:

Finding A-04-ESQ-TANKFARM-007-F01 - The Lockheed Martin Information Technology (LMIT) document control organization did not follow procedures for updating of controlled print files.

AFI A-04-ESQ-TANKFARM-007-A01. The assessors could not always find reference to the standard TFC-BSM-IRM-STD-05, Revision B-1, “Document Control Standard” within all the procedures. The Contractor acknowledged this weakness with PER 2004-3571.

AFI A-04-ESQ-TANKFARM-007-A02. The Contractor did not reflect the present requirements of the corrective actions of PER-2003-3422 (which had been incorporated in CH2M HILL procedures) to the subcontracts; and therefore, did not flow down the CH2M HILL program for document control.

AFI A-04-ESQ-TANKFARM-007-A03. The Contractor initiated PER-2004-3570 to determine and establish the training and qualifications for the Hanford Document Control System (HDACS) data entry function and to establish the basis for management's position. ORP will track this Problem Evaluation Request (PER) to completion under A-04-ESQ-TANKFARM-007-A03.

AFI A-04-ESQ-TANKFARM-007-A04. The level of controls in the HDACS process was insufficient to ensure data integrity and quality after entry. The issue of how database accuracy is maintained was captured in PER-2004-3552. The PER describes internal control deficiencies within LMIT including inadequacy of internal procedures, data entry authorizations, and validation controls.

AFI A-04-ESQ-TANKFARM-007-A05. Verify corrective action “Perform End Point Assessment” associated with PER-2003-3422 scheduled for completion by August 30, 2004, to determine the effectiveness of CH2M HILL’s corrective actions to ORP’s 2003 assessment.



## **Control of Documents for CH2M HILL**

The assessors reviewed the CH2M HILL plans and procedures within the document control program to verify the Contractor was compliant with the quality requirements. The assessors review of the CH2M HILL plans and procedures determined the Contractor had provided a flow down path for requirements from the Contract to the CH2M HILL procedures and standards via the Document Control Plan. The plan provided the controls required for documents that prescribe requirements, define processes, establish design, direct work activities, or provide controls necessary to ensure compliance with requirements.

The assessors reviewed the Document Control procedure which directed personnel to the CH2M HILL implementing procedures used to prepare, review, approve, distribute, use and revise Tank Farm Contractor (TFC) document types. The procedure also provided instructions for the procedures owners to prepare the procedures as specified. There were multiple processes described for controlling the different document types which included vendor information, design information, technical procedures covering operations, maintenance and test of operating facilities, administrative documents, publications, sensitive controlled information, safeguards and security information. The assessors verified procedures provided the specific controls for document preparations, review, approval, distribution, use, and revision.

### **Conclusions:**

The assessors concluded the CH2M HILL plans and procedures associated with the document control program were compliant with quality requirements. The assessment team concluded the procedures: 1) provided the controls required for all documents that prescribed requirements, defined processes, established design, directed work activities, or provided controls necessary to ensure compliance with these requirements; and 2) provided specific controls for document preparations, review, approval, distribution, use, and revision within the procedures describing or directing the document control process. However, in a few cases the assessors could not always find reference to the standard TFC-BSM-IRM-STD-05, Revision B-1, "Document Control Standard" within the procedures. The Contractor acknowledged this weakness and wrote PER 2004-3571. This will be tracked as an AFI item A-04-ESQ-TANKFARM-007-A01.

### **Document Control Process Implementation by LMIT**

The assessors reviewed LMIT plans, procedures, and desk instructions to verify LMIT was implementing the contractual requirements of CH2M HILL, for document control. The assessors observed the field implementation of the document control processes by LMIT as well as the oversight of document control by both LMIT and CH2M HILL. The assessors were unable to determine the program flow down from CH2M HILL procedures TFC-BSM-IRM-DC-C-01, "Document Control," and TFC-BSM-IRM-STD-05, "Document Control Standard," to the Fluor Hanford, Inc. (FHI) HNF-8310 "Document Control Program," and ultimately to the set of Requirements Information Management (RIM) procedures used by LMIT.

A thorough review of the contracts, statements of work (SOW) and task order agreements concluded the Contractor did not reflect the implementation of corrective actions specified in PER-2003-3422 (which had been incorporated to the CH2M HILL procedures) to their subcontracts. Document control requirements were not adequately flowed down to LMIT. The contractor acknowledged this weakness and issued PER-2004-3522 during the ORP assessment. This PER addressed deficiencies in the alignment and flowdown of appropriate requirements to CH2M HILL subcontractors. The closure of this PER will be tracked as an assessment follow up item, A-04-ESQ-TANKFARM-007-A02.

The assessors reviewed LMIT procedure RIM-106 that prescribed the process for maintenance of controlled print files (CPF). A field audit of the CPF at 242-A Evaporator Control Room was conducted. The assessors audited controlled print file 13B and found eight prints incorrectly stamped. Seven of the prints had Engineering Change Notices (ECN) posted, which had been superseded. RIM-106 required the superseded change to be crossed off on all affected drawing prints, removed from the CPF, and destroyed. This was not done. The eighth print (H-2-99085 Sheet 4-an electrical elementary) failed to have ECN-721802-R0 posted to print. While correcting the problem at 242-A Evaporator, LMIT staff also found two errors with CPF at the 222 S Laboratory. RIM-106 required a weekly report to be prepared by the RIM specialist and audits to be conducted twice annually. No evidence was found that these actions were being performed. This is considered a Finding for failure to follow procedure and is documented in A-04-ESQ-TANKFARM-007-F01.

The assessors' interviewed the LMIT HDCS data input personnel responsible for entering approved design information, such as ECNs and other controlled engineering documents, into the HDCS. Data entry was accomplished using knowledge of HDCS and RIM procedures, combined with good internal communications with the originators of the ECNs, and was a complex task. When questioned about training requirements for the data entry personnel, LMIT document control management was not able to define the training or qualification necessary. The Contractor initiated PER-2004-3570 to determine and establish the training and qualifications for this data entry function and to establish the basis for management's position. ORP will track this PER to completion under A-04-ESQ-TANKFARM-007-A03.

The assessors interviewed several system engineers and design authorities for use of CPF in applications, and found in one case two ECNs were given the same number. The incident was caused by the failure of the ECN data entry clerk to enter the ECN to HDCS prior to the clerk stamping the print as entered. This problem was caught and resolved by the engineering staff, but called into question the quality of data entry and what steps were taken to ensure data integrity and quality after entry. The issue of maintaining database accuracy was captured on PER-2004-3552. ORP will track this PER with AFI A-04-ESQ-TANKFARM-007-A04.

## **Conclusions:**

The assessors concluded the document control process was not effectively implemented in the field due to the following reasons:

1. CH2M HILL had not adequately flowed down the CH2M HILL program requirements for document control to the subcontractors. (A-04-ESQ-TANKFARM-007-A02.);
2. Failure to follow procedure and update the CPF per RIM-106. This is considered a Finding for failure to follow procedure and is documented in A-04-ESQ-TANKFARM-007-F01;
3. Failure to establish the training and qualifications for the data entry personnel who have access and control of the design information in the HDCS database; and
4. The Contractor has no identified method of control to control and verify the design change information to the HDCS database or controlled documents and print files. (A-04-ESQ-TANKFARM-007-A04).

## **Records**

The assessors performed a variety of reviews to verify that records generation and maintenance activities were being performed. This included a review of records management process implementation procedures and organization-specific instructions that addressed identification, preparation, record legibility, traceability, in-process safeguards, authentication, collection, retention, storage, and retrieval of records.

The Assessors interviewed Contractor staff and determined LMIT is the Hanford Site's records storage and final disposal service provider (sub-contracted with FHI). Discussions with LMIT RIM staff revealed that DOE and Hanford Site Contractor records identification and disposition requirements were based on the guidelines provided in National Archives and Records Administration General Record Schedules, and as supplemented by DOE Records Schedules. LMIT Records Management Specialist (RMS) supported and coordinated the Contractor management development of Records Inventory and Disposition Schedules on an annual basis. In addition, the RMS was responsible for maintaining and providing batches of Bar Coded labels to the designated Records Inventory Coordinator (RIC). Using Bar Coded records containers simplified record retrieval activities. The RMS was also responsible for authorizing the RIC for transfer of accumulated records containers to the DOE Records Holding Area (RHA), Building 712, in Richland, Washington, as well as, scheduling the pick up of records containers upon verification that the containers were appropriately labeled, records indexed, and staged for pick up. The completed transfer authorization and pick up documents was maintained by the RIC. All record materials were scanned into the Records Management Information System database by LMIT Imaging Operations staff before or after receipt at RHA. The LMIT staff at RHA maintained a computerized data base to track the status of bar coded records containers while in storage, when temporarily removed for review, or when removed for imaging operations.

## **Conclusions:**

The assessors reviewed portions of the Contractor's implementing documents that discussed responsibilities and requirements for records identification, generation, control, authentication, collection, indexing, inventory, and transmittal for storage, and found them to be satisfactory. Work was performed in accordance with requirements set prescribed in the QAPD. The assessors did not identify any issues with the records generation and maintenance processes and practices of the Contractor and that of LMIT. The assessors concluded that the Contractor's overall program for records generation and maintenance was satisfactory.

## **Work Processes**

### **Special Processes**

The assessors reviewed and assessed Contractor's procurement and oversight of fabrication activities performed to support maintenance and project construction. Special processes such as welding, brazing, and NDE were performed by Parsons Hanford Fabricators (PHF), Hi-Line Engineering and Manufacturing (Hi-Line), Apollo, Inc., and Washington Group Incorporated.

The assessors reviewed a Requisition for Proposal (RFP) 050103-DLS issued to PHF, Pasco, Washington, for obtaining fabrication services on a continuous basis to support CH2M HILL's routine and urgent fabrication needs. Attachment A to the RFP was the corresponding master SOW for the Hanford Fabrication Services. The SOW stated that the subcontractor would be responsible for all aspects of fabrication processes including fabrication, repair, and modification of items and components. The SOW invoked health and safety requirements, quality assurance requirements, general training and qualification requirements for subcontractor employees as well as the applicable national codes and standards. Requirements included personnel qualification and certification for welders, examiners, and inspectors.

The assessors reviewed the two (2) supplier evaluation reports related to sub-contracts with Hi-Line and PHF. It was noted that the Contractor used FHI Acquisition Verification Services staff to perform supplier evaluations. CH2M HILL also utilized the Supplier Evaluation Listing published and maintained by FHI for its procurement of materials, services, and components.

The assessors determined CH2M HILL oversight of their special process subcontractors. The assessors reviewed seventeen (17) quality assurance surveillances performed since July 2003. The reports documented the CH2M HILL oversight of welding and NDE activities performed by PHF, Hi-Line, Apollo, Inc., and Washington Group International. The review revealed that oversight performed addressed subcontractor work control, welding performance, weld procedures and welder qualifications, weld examinations, tests, inspections, and adequacy of supporting documentation.

## **Conclusions:**

Based on the reviews performed and personnel interviewed, the assessors verified that the Contractor quality assurance practices including oversight of welding and NDE activities were satisfactorily being performed. Work was performed in conformance with requirements set forth in the QAPD. The Contractor assessments addressed subcontractor welding procedures and procedure qualification, personnel qualifications, material control, nondestructive examinations, welding performance, quality control inspections, storage, handling, shipping, and receipt inspection. The completed surveillance and the checklist were thoroughly documented. In addition, the assessor interviewed the surveillance performer and was satisfied that this individual has in depth knowledge of welding and quality assurance program requirements. The assessors concluded the Contractor program and practices related to control of special processes was effective. The assessors did not identify any concerns or issues.

## **Identification and Control of Items; Handling, Storage, and Shipping**

The assessors reviewed the procedures governing the receipt, storage, issuance, return, and control of materials, including equipment, supplies, and consumables. The assessors interviewed CH2M HILL employees and observed operations to assess the adequacy of implementation of the receiving, staging, issuance, storage, and handling of materials process.

The assessors performed field inspections and reviewed procedures and records for the identification and control of items at the MO997 level B storage area, and the Wet Grout Lay down level D storage area. The level B storage was inside a weather tight, fire resistant building that was uniformly heated and cooled. The assessors selected a row of shelves to inspect and then randomly selected items to verify they were adequately identified.

The assessors interviewed employees in the Material Services area and were informed that the heavier items were moved around the outdoor storage area by means of a forklift. The assessors reviewed forklift operator qualifications available at the MO282 offices and were directed to the training department to obtain documentation including course descriptions, class rosters, and completed operator evaluations. The operators were trained and qualified in accordance with the Hanford Site "Hoisting and Rigging Manual." Personnel who operated forklifts had been requalified every 36 months through examination and an evaluation of their performance.

The assessors verified the contractor had developed adequate procedures for the handling, storage, and shipping of items and was effectively implementing them. The assessors did not identify any issues with the handling, storage, identification, or control of items processes. Likewise, there were no issues with the qualifications of personnel operating handling equipment for Materials Services.

## **Conclusions:**

The assessors concluded CH2M HILL had established and effectively implemented procedures, in accordance with requirements of the QAPD, for the identification and control of items. All equipment inspected had been properly identified and controlled. The assessment team determined that CH2M HILL staff was knowledgeable of the applicable procedures and that work was performed in accordance with the requirements.

## **Control of Measuring and Test Equipment**

The assessors reviewed CH2M HILL procedures, M&TE inventory records, M&TE calibration reports, M&TE QA inspection plans, acceptance tags, and M&TE calibration stickers. The team visited the consolidated CH2M HILL M&TE storage area located at 2704 HV to review documents, interview staff, and observe work activities.

Assessors selected items from the locked M&TE storage areas and compared equipment calibration tags to the information contained in the M&TE inventory records to verify the records were maintained as current. Using CH2M HILL M&TE records, the assessors then verified the calibration of specific equipment randomly selected from storage cabinets was in agreement with CH2M HILL records. The review showed M&TE available for use was properly calibrated.

The assessors verified the contractor's measuring and testing tools, gauges, and other measuring and testing devices used for process monitoring, data collection, inspection, and testing were calibrated and adjusted at specified intervals as required to maintain their accuracy within specified limits.

When the assessors asked for hard copies of calibration records CH2M HILL staff printed them from the electronic database. The assessors verified the equipment was properly marked or otherwise identified to indicate its calibration status, and was handled and stored in a manner that precluded adverse impact on its accuracy.

The Certificates of Calibration from the Energy Northwest Standards Laboratory stated compliance with requirements of 10 CFR 50 Appendix B and American National Standards Institute/NCSL Z-540-1. These statements verified calibration was performed using standards traceable to nationally recognized standards.

## **Conclusions:**

The inspectors concluded the Contractor had established an effective system and had successfully implemented processes used to identify, label, store, calibrate, and issue M&TE. Work processes conformed to requirements set forth in the contractor's QAPD. All equipment inspected had been properly identified and calibrated. The assessment team determined that CH2M HILL staff was knowledgeable of the applicable procedures and that work was performed in accordance with the requirements.

## **Control of Samples**

The inspectors reviewed the procedures and documentation relevant to the delivery of samples to the 222-S Laboratory, the controls provided for several phases of sample control, and documentation of the sample chain of custody through final use. The assessors interviewed staff to understand the sampling and analysis process and to assess the adequacy of the identification and control of samples process.

The assessors visited the 2704S Building, the support offices for the 222-S Laboratory to review records and documents for a randomly-selected high level waste tank sample. The review included chain of custody records for ten grab samples from tank C-106 which were received at the lab on January 29, 2004. The samples were subdivided as indicated by the composite worksheets and analyzed in accordance with the tank sampling and analysis plan. The remainder of the C-106 samples was shipped on April 13, 2004, to the Pacific Northwest National Laboratory (PNNL) for further analysis at the Radiochemical Processing Lab. The chain of custody records clearly indicated the exchange of responsibility at the point the samples entered the 222-S Lab through the delivery of the samples to PNNL. The chain of custody forms included the time and date the sample was relinquished by the deliverer, and accepted by the recipient.

## **Conclusions:**

The inspectors concluded the Contractor had established and implemented a system and process for assuring identification of responsibilities for all phases of sample control, and was in compliance with requirements of the CH2M HILL QAPD. The documentation of the chain of custody and interfaces between organizations was appropriate and effective. No deficiencies were noted.

## **Verification of Corrective Actions from Prior Year's Assessment**

The assessors reviewed Contractor correspondence, CH2M-0302144 R1 dated August 14, 2003, Response to Assessment Team Findings, A-03-ESQ-TANKFARM-003, and the documentation pertaining to remedial and corrective actions that implemented and attested to the Findings closure status declared by the Contractor. The assessors discussed the Findings and related actions with the Contractor's QA staff and obtained corresponding record files for review to determine if the assessment Findings could be closed. When the Contractor performs an End-Point Assessment (EPA) as the last step in closing out PER-2003-3422 ORP will be able to assess all of the corrective actions taken in response to their 2003 assessment of CH2M HILL's Documents, Records, and Work Processes. The schedule for EPA completion is August 30, 2004. The scope includes review of objective evidence from the corrective actions, a review of the PER database and performance of field verifications.

## **Conclusions:**

Based on the remaining corrective action to be performed, the assessors considered A-03-ESQ-TANKFARM-003 Findings still open. ORP will track verification of the effectiveness of actions implemented to resolve Significant PER-2003-3422 as an AFI.

## **2.0 Exit Meeting Summary**

The assessors presented preliminary assessment results to members of CH2M HILL's management at an exit meeting held on June 25, 2004. CH2M HILL acknowledged the Finding, and conclusions presented.

## **3.0 REPORT BACKGROUND INFORMATION**

### **3.3**

#### **List of Items Opened**

Finding A-04-ESQ-TANKFARM-007-F01 – The LMIT document control organization did not follow procedures for updating of CPFs.

AFI A-04-ESQ-TANKFARM-007-A01. The assessors could not always find reference to the standard TFC-BSM-IRM-STD-05, Revision B-1, "Document Control Standard" within all the procedures. The Contractor acknowledged this weakness with PER-2004-3571.

AFI A-04-ESQ-TANKFARM-007-A02. The Contractor did not reflect the present requirements of the corrective actions of PER-3422 (which had been incorporated to the CH2M HILL procedures) to the subcontracts; and therefore, did flow down the CH2M HILL program for document control.

AFI A-04-ESQ-TANKFARM-007-A03. The Contractor initiated PER-2004-3570 to determine and establish the training and qualifications for the HDCS data entry function and to establish the basis for management's position. ORP will track this PER to completion under A-04-ESQ-TANKFARM-007-A03.

AFI A-04-ESQ-TANKFARM-007-A04. Issue of what steps were taken to ensure data integrity and quality after entry. This issue of how the database is maintained accurate was captured on PER-2004-3552. ORP will track this PER with AFI A-04-ESQ-TANKFARM-007-A04.

AFI A-04-ESQ-TANKFARM-007-A05. Verify corrective action "Perform End Point Assessment" scheduled for completion by August 30, 2004, to determine the effectiveness of CH2M HILL's corrective actions resulting from ORP's 2003 assessment.