



U.S. Department of Energy
OFFICE OF RIVER PROTECTION

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06-ESQ-143

NOV 22 2006

Mr. M. S. Spears, President
and Chief Manager
CH2M HILL Hanford Group, Inc.
2440 Stevens Center Place
Richland, Washington 99354

Dear Mr. Spears:

CONTRACT NO. DE-AC27-99RL14047 – U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION (ORP) ASSESSMENT REPORT A-06-ESQ-TANKFARM-008, OF CH2M HILL HANFORD GROUP, INC. (CH2M HILL) PROGRAM FOR THE CONTROL OF DOCUMENTS AND RECORDS

This letter forwards the results of the ORP assessment of the CH2M HILL program for control of documents and records conducted September 19 through 26, 2006. The assessment identified five Findings and two Observations. One Finding identified a problem with the interface between CH2M HILL and Lockheed Martin Services, Inc. records management processes which could have led to the premature destruction of lifetime records. Other Findings identified that documents at work sites could be outdated and at least one manual that was not subjected to the required unreviewed safety question process.

Despite the Findings, the assessment team concluded control of CH2M HILL documents and records generally complied with contractual requirements. The Findings represent error precursors and latent organizational weaknesses that have created vulnerabilities for CH2M HILL in meeting its safety and regulatory obligations with respect to control of documents and records.

Within 30 days of receipt of this letter CH2M HILL should respond to the assessment Findings. The response should include:

- The causes of the Findings;
- The corrective steps that have been taken to control or remove any adverse impact to identified noncompliance situations (remedial actions) and the results achieved;
- The corrective steps that will be taken to prevent further Findings; and
- The date when all corrective actions will be completed, verified, and compliance to applicable requirements will be achieved.

Mr. M. S. Spears
06-ESQ-143

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During the past 3 years CH2M HILL staff have conducted no independent assessments addressing document control and records management, although CH2M HILL has conducted 13 management assessments on these topics. As we understand it, presently CH2M HILL has only one qualified assessor conducting independent assessments. Your response should explain why the CH2M HILL oversight program failed to find and correct the conditions identified in the Findings before the ORP assessment.

The assessment Observations do not identify deficiencies, but represent experience-based observations of the team members that CH2M HILL should consider as a source of information for improving its program. CH2M HILL is not required to respond to the Observations.

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,


Roy J. Schepens, Manager
Office of River Protection

ESQ:SAV

Attachment

cc w/attach:

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Administrative Record
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U.S. DEPARTMENT OF ENERGY
Office of River Protection
Environmental Safety and Quality

ASSESSMENT: CH2M HILL Hanford Group, Inc. Documents and Records

REPORT: A-06-ESQ-TANKFARM-008

FACILITY: Hanford Tank Farms (CH2M HILL Hanford Group, Inc.)

LOCATION: Richland, Washington

DATES: September 18 through 26, 2006

ASSESSORS: Samuel A. Vega, Lead Assessor
David H. Brown, Assessor

APPROVED BY: Patrick P. Carrier, Team Lead
Verification and Confirmation Official

Executive Summary

From September 19 through 26, 2006, the U.S. Department of Energy (DOE), Office of River Protection (ORP) conducted a routine, scheduled assessment of CH2M HILL Hanford Group, Inc. (CH2M HILL) control of documents and records. CH2M HILL described its programs for the control of documents and records in TFC-PLN-02, Revision C-1, "Quality Assurance Program Description," (QAPD).

This was a performance-based assessment in which the assessment team (Team) checked document control and records management processes in a variety of CH2M HILL organizations to verify documents were being controlled and records were managed in accordance with DOE and QAPD requirements. The Team checked for deficiencies in Closure Operations, Waste Feed Operations, Quality Assurance (QA), Radiological Control, Testing, Training, Procedure Development, Engineering, Work Planning, Analytical Technical Services, and Lockheed Martin Services, Inc. (LMSI) site services activities, among others.

The assessment resulted in five Findings and two Observations. The Findings described several noncompliances associated with uncontrolled documents and errors in records management. Each of these conditions represented error precursors or latent organizational weaknesses that create risk for CH2M HILL in meeting its safety and regulatory obligations. The assessment identified the following Findings:

A-06-ESQ-TANKFARM-008-F01 – Contrary to the requirements of Section 17.2.4 of the QAPD, CH2M HILL personnel used an uncontrolled, LMSI directive to incorrectly classify some QA records. This could have allowed premature destruction of records.

A-06-ESQ-TANKFARM-008-F02 – Contrary to the requirements of the Fluor Federal Services document control Procedure Number 134 500 8420, the construction contractor used uncontrolled documents for work.

A-06-ESQ-TANKFARM-008-F03 – Contrary to the requirements of TFC-BSM-IRM-DC-C-02, Section 4.2.1, some local record handling procedures did not implement all specified record handling requirements.

A-06-ESQ-TANKFARM-008-F04 – Contrary to the requirements of TFC-ENG-SB-C-03, the Radiological Control Instructions manual and manual changes were not subject to the required Unreviewed Safety Question process.

A-06-ESQ-TANKFARM-008-F05 – Contrary to the requirements of TFC-PLN-05, a Closure Operations round sheet book contained an uncontrolled operator aid.

The assessment team noted the training for records custodians could be improved and some records management terms should be defined to reduce confusion (Observations).

The Team found that, with the exception of the conditions identified in the Findings, CH2M HILL implemented programs for the control of documents and records that conformed to the QAPD and other contract and regulatory requirements. Requirements were implemented in

procedures, and personnel usually followed the procedures. With the exception of the conditions noted in the Findings, documents in the field were controlled, and records were managed. The Team considered the CH2M HILL document control and records management programs were improved over the conditions reported in ORP Assessment A-03-ESQ-TANKFARM-003 of May 2003, but more improvement is required.

A response to the Findings is required. The response should include an explanation of why the CH2M HILL oversight program failed to identify and correct these conditions.

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List of Acronyms

ATS	Analytical Technical Services
CH2M HILL	CH2M HILL Hanford Group, Inc.
ECN	Engineering Change Notice
FFS	Fluor Federal Services, Inc.
HDCS	Hanford Document Control System
IRM	Information Resource Management
LMSI	Lockheed Martin Services, Inc.
OAT	Operational Acceptance Test
ORP	Office of River Protection
PER	Problem Evaluation Request
QA	Quality Assurance
QAPD	Quality Assurance Program Description
RIDS	Records Inventory and Disposition Schedule
Team	Assessment Team
USQ	Unreviewed Safety Question
WFO	Waste Feed Operations

CH2M HILL Hanford Group, Inc. (CH2M HILL)

Control of Documents and Records

1.0 Details

This assessment evaluated the CH2M HILL document control and records management programs, which are described in TFC-PLN-02, “Quality Assurance Program Description,” Section 6.0, “Document Control,” and Section 17.0, “Quality Assurance Records.” The Team evaluated evidence of proper implementation of these requirements in a sample of activities, including:

- Procedure development and control;
- Work package development and control;
- Plant drawing development and control;
- Training document development and control;
- Vendor information maintenance;
- Operations;
- Testing;
- Independent assessment; and
- Document control and records management support.

The Team looked for evidence of implementation in several organizations, including Closure Operations, Waste Feed Operations (WFO), 222-S Laboratory maintenance, Engineering Standards, Radiological Control, Operational Readiness, Lockheed Martin Services, Inc. (LMSI) Records Inventory Management Services, and Analytical Technical Services.

1.1 Document Control

The Team evaluated the document control process for compliance with the requirements of TFC-PLN-02, Revision C-1, “Quality Assurance Program Description,” TFC-BSM-IRM-DC-C-01, Revision C-2, “Document Control,” and TFC-BSM-IRM-STD-05, Revision B-2, “Document Control Standard.” Organizations generating documents were to establish document control procedures and processes that conformed to these requirements. The Team evaluated conformance to these requirements as follows:

Procedures Organization

The Procedures organization developed technical and higher level administrative procedures for all CH2M HILL organizations. The Procedures organization implemented the requirements of

TFC-BSM-IRM-DC-C-01, “Document Control,” and TFC-BSM-IRM-STD-05, “Document Control Standard” through TFC-OPS-OPER-C-13, “Technical Procedure Control and Use,” and TFC-BSM-AD-C-01, “Administrative Document Development and Maintenance.”

The Team reviewed a sample of work instructions in development, technical procedures in use in the field, and administrative procedures in use and found no problems with document control in Procedures organization activities.

The Team concluded that Procedures organization document control processes were appropriately specified in procedures and the procedures were followed.

Engineering Standards Organization

The Team interviewed managers in Engineering Standards and evaluated a sample of documents in the field controlled by this organization’s document control procedures. The Team found that Engineering Standards implemented the requirements of TFC-BSM-IRM-DC-C-01, “Document Control,” through their procedures TFC-ENG-DESIGN-C-25, “Technical Document Control,” and TFC-ENG-DESIGN-C-06, “Engineering Change Control.” These procedures governed the development of documents such as drawings and Engineering Change Notices (ECN). The Team found no document control errors in a sample of documents checked in the field.

The Team concluded that Engineering Standards organization document control processes were appropriately specified in procedures. The Team saw no evidence that the procedures were incorrectly followed.

Training Organization

The Team interviewed managers in Training and reviewed document control procedures used by Training. The Team found that Training implemented the requirements of TFC-BSM-IRM-DC-C-01, “Document Control,” through TFC-BSM-TQ-ADD-C-01, “Training Analysis, Design, and Development,” and TFC-BSM-TQ-MGT-C-04, “Training Records Administration.” These procedures addressed the processes by which Training developed, approved, and controlled distribution of qualification cards and lesson plans. The Team then reviewed a sample of qualification cards and lesson plans and found no document control errors.

The assessor concluded that Training organization document control processes were appropriately specified in procedures and the procedures were followed.

Construction and Maintenance

The Team observed a sample of work activities in the field, including construction activities associated with work on C-108 Risers #2 and #7, CLO-WO-05-000921, 241-C-108, “Install Sluicer Riser #2 and #7 and 5-EDS-146, 241/244-BX Electrical Inspections.” The Team looked for evidence of breakdowns in document control processes in the engineering, planning, and execution of this work. Some of the work was performed by CH2M HILL and some was performed by a construction contractor, Fluor Federal Services (FFS).

The Team found that sometimes FFS performed work in which they used work packages prepared for them by CH2M HILL, while in other cases they performed work in accordance with instructions they assembled from documents provided by CH2M HILL. The Team checked and found no errors in work packages provided by CH2M HILL, but found a weakness in control of design documents provided to FFS in the field.

The Team observed the acceptance and processing of an ECN by FFS, and found FFS did not properly control design documents of this type. FFS document control personnel accepted the document and issued a controlled copy to the Construction Engineer, but issued uncontrolled copies to the craft to actually perform the work. This is contrary to both the applicable FFS document control procedure and the CH2M HILL Quality Assurance Program Description (QAPD) which require work to be performed using controlled documents. When interviewed about this, FFS management stated they considered the practice of using uncontrolled procedures to be consistent with the intent of their document control procedure, because craft were expected to check their uncontrolled documents against the controlled documents held by the Construction Engineer. The Team documented this issue in Finding A-06-ESQ-TANKFARM-008-F02.

Operations

The Team interviewed personnel and reviewed documents, including operator round sheets, used in Operations activities. The Team found that the Operations organizations (both Closure Operations and WFOs) used procedures that were developed by the Procedures organization in accordance with TFC-OPS-OPER-C-13, "Technical Procedure Control and Use." Operations personnel printed procedures and other controlled documents directly from the network and used them in the field to specify operator rounds, routines, and other activities.

The Team found no errors in documents used by WFOs, but found that Closure Operations had an outdated, uncontrolled procedure for a routine filed in the active round sheet book for (apparently) two and a half years. Specifically, the round sheet book contained one page from Procedure TO-060-262, Revision D-23, "Operate TK-244-TX Exhauster System," but the most recent revision was Revision E-5. Over the two and a half year period from when Revision D-23 was superseded by Revision D-24 until the equipment was removed from service the procedure was changed and revised seven times. When the equipment was removed from service in June 2006, the procedure page was not removed from the round sheet book.

Closure Operations management said the procedure page described how to accomplish the operator routine of draining the TK-244-TX exhauster stack, but it was not used for this purpose. Instead, they said, to perform the routine, operators downloaded the current procedure, intact, from the network and used it correctly. However, CH2M HILL management could not explain where the procedure page came from nor why it was in the round sheet book. The procedure page was marked "Continuous Use" and "TSR Compliance." The Team identified the procedure page as an uncontrolled operator aid that did not comply with the requirements of TFC-PLN-05, "Conduct of Operations Implementation Plan."

The Team concluded that both WFOs and Closure Operations followed the CH2M HILL document control procedures during operations activities. However, the Team also documented

the issue of the uncontrolled Closure Operations operator aid in Finding A-06-ESQ-TANKFARM-008-F05.

Work Planning

The Team interviewed planning personnel and reviewed the work planning process with two planners using existing work packages as examples. These included CLO-WO-05-00294, “Install C-108 HIHTLs at POR104,” CLO-WO-06-000699, “Perform In-Tank Video Equipment Decon, Repair and Clean,” and CLO-WO-06-001231, “Repair B-202 Enraf.” The Team also interviewed system engineers associated with the sample work packages. The planners demonstrated how work packages were developed and subjected to the review and approval process.

The Team found no document control errors in work packages and concluded CH2M HILL had a functional document control system for development and use of work packages.

Operational Readiness (Testing)

The Team interviewed personnel responsible for testing and reviewed CH2M HILL testing procedures. The Team found that the Operational Readiness organization was responsible for developing, distributing, and performing Operational Acceptance Test (OAT) procedures. It implemented the requirements of TFC-BSM-IRM-DC-C-01, “Document Control,” and TFC-BSM-IRM-STD-05, “Document Control Standard,” through TFC-PRJ-SUT-C-01, “Test Plan Preparation,” TFC-PRJ-SUT-C-02, “Operational Acceptance Test Preparation,” TFC-PRJ-SUT-C-03, “Conduct of Testing,” and TFC-PRJ-SUT-C-04, “Test Results Report Preparation.” These procedures specified how test plans, test procedures, and other test documents were developed, approved, and released.

Test procedures were not required to be controlled under the engineering release process. Instead, responsibility for issuance, use, and change control remained within the Operational Readiness organization. Depending on the nature of an OAT procedure or a change to an OAT procedure, documents and document changes were approved by the Joint Test Group or the Joint Test Working Group. These organizations were made up of managers with defined roles.

The Team observed a sample of testing activities and reviewed the associated test documents. This included OAT Procedure, ER-311-OAT-1.0, “Operational Acceptance Test for Exhauster.” The Team found no errors and concluded CH2M HILL had a functional process for development and use of test documents.

Radiological Control Organization

The Team interviewed Radiological Control organization managers and reviewed a sample documents used to specify radiological control activities. The Team found Radiological Control implemented the requirements of TFC-BSM-IRM-DC-C-01, “Document Control,” and TFC-BSM-IRM-STD-05, “Document Control Standard,” in procedures that included RPP-5779, RCI-01, “Radiological Control Instruction Administration,” and TFC-ESHQ-RP-MON-P-10, “Required Radiological Surveillances.” Many documents used in radiological control were

forms (such as radiation survey forms and radiation work permits) that were maintained in the Site Forms area of the Hanford Local Area Network. The Team checked a sample of these forms in the field and found that all were current with respect to the network versions.

The Team found that the Radiological Control organization did not obtain the required Unreviewed Safety Question (USQ) screening for changes to procedures in the Radiological Control Instructions Manual, RPP-5779. The Team documented this issue in Finding A-06-ESQ-TANKFARM-008-F04. The issue was identified previously by CH2M HILL in Problem Evaluation Request (PER) CH2M-PER-2002-0048. The PER resolution included the statements “In the case of the radiological control manual, it is also implementing TSR controls; however, it must be approved by DOE ... If manuals are approved by DOE/ORP, no USQ review is required.” This appeared to state a position that RPP-5779 was approved by the U.S. Department of Energy (DOE), Office of River Protection (ORP) along with the Radiological Control Manual and was therefore exempt from the USQ process, but this was not the case.

Lockheed Martin Site Services

The Team interviewed LMSI personnel and reviewed LMSI procedures. The primary function of LMSI for CH2M HILL with respect to document control was operation of document release stations and maintaining the document database. The database was the Hanford Document Control System (HDCS) which was accessible by most Hanford Site personnel. At the time of the assessment, most CH2M HILL documents were controlled within HDCS. Engineers who needed drawings could simply print them out of HDCS, confident they had the correct version and change notices.

LMSI maintained controlled hard copy files of some CH2M HILL drawings at three stations located in 200E and 200W areas. The Team visited two of the stations and checked a sample of drawings and ECNs for currency. The Team found no document control errors at either station.

LMSI also maintained controlled vendor information files for CH2M HILL. The Team checked a sample of vendor information documents at the work site and found they correctly matched the vendor information files maintained by LMSI.

The Team concluded LMSI had clearly defined document control responsibilities that they properly performed in accordance with procedures. However, other sections of this report describe an LMSI document control issue that led to records management errors.

1.2 Records Management

The Team evaluated the records management process for compliance with the requirements of TFC-PLN-02, Revision C-1, “Quality Assurance Program Description” and TFC-BSM-IRM-DC-C-02, Revision C-7, “Records Management.” Organizations generating documents were to establish records management procedures and processes that conformed to these requirements. The Team evaluated conformance to these requirements as follows:

Information Resource Management (IRM)

The Team found that the IRM organization, headed by the Chief Information Officer, was responsible for setting records management policy and requirements for CH2M HILL. IRM maintained Procedure TFC-BSM-IRM-DC-C-02, "Records Management," which described the company-level records management processes. Individual organizations developed their own records management procedures that implemented the records management requirements. IRM was also responsible for management of the Records Inventory and Disposition Schedule (RIDS) process, although some of the RIDS' activity was contracted to LMSI. Using the RIDS process, each organization was to identify and classify its records. The specific classifications, identified in the QAPD and TFC-BSM-IRM-DC-C-02, included "QA" and "non-QA" records. The CH2M HILL requirements then specified within "QA records" the classification categories of "lifetime" and "non-permanent" records as described in NQA-1-2000.

The Team considered the meanings of terms specified for handling records could be better defined to prevent confusion. For example, TFC-BSM-IRM-DC-C-02 required "indexing" and "classification" but failed to define these terms. The procedure also failed to provide criteria for these activities. All record stations performed a function they considered as indexing, but each applied a different method. Most did not satisfy the criteria and examples of indexing provided in the NQA-1-2000, Appendix 16A-1 non-mandatory guidance. This issue is described in Observation A-06-ESQ-TANKFARM-008-002.

CH2M HILL Company level records management procedures adequately implemented QAPD requirements and provided sufficient processes to manage records. However, the Observation indicates a potential improvement.

Waste Feed Operations

The Team found the records maintained by the WFOs Technical Data Service Center were adequately maintained. File cabinets containing records were in proper order in that records were stored according to the index, were properly segregated and protected, were controlled through a check out process, were properly authenticated, and were identified in the RIDS process.

The Team found the records handling procedure TFC-BSM-IRM-DC-C-06, "Technical Data Service Center," was incomplete and did not implement all necessary requirements of TFC-BSM-IRM-DC-C-02, "Records Management." Similar deficiencies were common among local records management procedures, so the Team documented this problem in assessment Finding A-06-ESQ-TANKFARM-008-F03. The Team concluded the procedure deficiencies did not impact the effectiveness of the activity because the missing processes were rarely used or were performed correctly due to the process knowledge of the individuals maintaining the records.

The Team conducted a walkdown of the work areas in 272-AW and found records were properly maintained and protected while used at individual work stations. This was a significant improvement over the conditions identified in ORP Assessment A-03-ESQ-TANKFARM-003 of May 2003.

Safety, Health, and Quality Assurance (QA)

The Team interviewed the records custodian for Independent Assessments and the Price-Anderson Amendments Act organizations, reviewed their respective records handling procedures, inspected their record stations, and reviewed the associated RIDS. The Team also reviewed several other RIDS associated with records for surveillances, management assessments, procurement, and other activities to verify the storage requirements of TFC-BSM-IRM-DC-C-02, "Records Management," and TFC-BSM-IRM-STD-06, "Records Management Standard," were adequately implemented.

The Team found the records handling Procedure TFC-ESHQ-AD-D-04, "Establishing and Maintaining Individual Assessment and Program Files," was incomplete and did not implement all necessary requirements of TFC-BSM-IRM-DC-C-02, "Records Management." Similar deficiencies were common among local records management procedures, so the Team documented this problem in assessment Finding A-06-ESQ-TANKFARM-008-F03.

The Team found some records, such as independent assessment reports, were incorrectly classified as "records," indicating they were not "QA records." As "records," they were not subject to the "lifetime records" classification to which they would have been assigned had they been properly identified as "QA records." Records custodians interviewed by the Team said this occurred when they applied a classification process that failed to lead them to identify these as QA records. The classification process was described in a draft guide provided by LMSI that CH2M HILL personnel used in place of the proper CH2M HILL procedure. The guide was not approved by CH2M HILL management and conflicted with the QAPD. The Team found this problem in the records management processes of several organizations, and documented the issue in Finding A-06-ESQ-TANKFARM-008-F01. The most significant consequence of this Finding is that lifetime records could be prematurely destroyed. However, there was a court-mandated moratorium on the destruction of records, and there was no reason to believe any lifetime records were destroyed.

The Team checked several file cabinets at each records storage area containing records and found they were in proper order in that records were stored according to the index, were properly segregated and protected, were controlled through a check out process, were properly authenticated, and were identified in the RIDS process. The Team concluded that, with the exception of the issues identified in the two Findings, records were adequately managed within the Safety, Health, and Quality Assurance organization.

Engineering

The Team found Engineering records maintained in the D wing of 2750E were properly maintained and protected, but, as in other CH2M HILL organizations, the application of the RIDS records classification activities were not always in compliance with QAPD and records management procedure requirements. This resulted in the incorrect classification of engineering records and put at risk the retention of records that should have been classified as lifetime QA records. The Team documented this problem in assessment Finding A-06-ESQ-TANKFARM-008-F01.

The Team found the Engineering record handling procedure was incomplete and did not address all the information required in TFC-BSM-IRM-DC-C-02, "Records Management." The procedure did not discuss or reference processes for record retention, classification, and location and did not discuss or reference processes for replacement of lost or damaged records. This issue is described in Finding A-06-ESQ-TANKFARM-008-F03.

Analytical Technical Services (ATS)

The Team found that ATS records stored in MO-291 were in proper order in that records were stored according to an index, were properly segregated, were protected, were properly authenticated, and were classified with RIDS documentation.

The team found the records stored in MO-409 were not in compliant with records management requirements. The records area did not have adequate access control and records were not adequately protected from damage or loss. Discussions with ATS management indicated this issue was previously identified in a management assessment and captured in PER 2006 1253. The Team reviewed the PER and the planned corrective actions and determined this issue will be properly addressed.

As in other locations, the Team found records maintained by ATS were not always classified in accordance with the requirements of the QAPD. For example, records of analytical activities were not always classified as lifetime or non-permanent QA records. The Team documented this problem in assessment Finding A-06-ESQ-TANKFARM-008-F01.

The Team found the records handling Procedure ATS-MP-1005, "Records Management Procedure," was incomplete and did not implement all necessary requirements of TFC-BSM-IRM-DC-C-02, "Records Management." The procedure did not provide or reference processes for all the activities required to be addressed. Specifically, the procedure did not address control of unauthorized access, replacement of records if lost or stolen, location and description of record stations, indexing, filing systems, and superseded records. The Team found that because the procedures failed to identify processes for record indexing and for controlling access to records, both record areas looked at were applying different informal indexing systems and were not applying any formal controls for checking out records. Similar deficiencies were common among local records management procedures, so the Team documented this problem in assessment Finding A-06-ESQ-TANKFARM-008-F03.

CH2M HILL provided training for ATS record coordinators in Course 356110, "Document Control and Records Management," but this provided only an overview of the records management process. It did not provide the level of detail necessary to prevent the problems identified in this assessment. For example, there was no formal requirement to read document control and records management procedures or the records handling procedure. This training issue is described in Observation A-06-ESQ-TANKFARM-008-O01.

LMSI

The Team found LMSI, as a site service, managed records for CH2M HILL once CH2M HILL personnel entered the records into their RIDS. However, LMSI personnel also assisted CH2M HILL personnel in classifying records. LMSI personnel provided CH2M HILL personnel with an LMSI directive that specified classifying records as “non-record,” “record,” “QA record,” and “vital record” material. This directive was not approved by CH2M HILL management and conflicted with CH2M HILL Procedure TFC-BSM-IRM-DC-C-02, Revision C-7, “Records Management,” in that it failed to implement the QA record classifications of “non-permanent” and “lifetime” records as sub-classifications of “QA records.” It also contained guidance discouraging personnel from classifying records as “QA records” in order to reduce the cost of record storage. Record retention schedules applied by LMSI were based on DOE O 200.1, “Information Management Program,” which CH2M HILL was also required to implement, but the schedules had not been reconciled with NQA-1-2000 which is on what the QAPD was based.

The result was that CH2M HILL and LMSI personnel incorrectly classified QA records and established record retention times in accordance with DOE O 200.1, “Information Management Program,” which invoked the retention schedules of U.S. National Archives and Records Administration. These requirements were sometimes less restrictive than the retention requirements of the QAPD and could have led to premature destruction of records that should have been classified as “lifetime records.” Also, the copy of the LMSI procedure provided to the Team was marked “draft,” although CH2M HILL management later provided a copy with an approval date. The Team documented the issue of incorrectly classified records in Finding A-06-ESQ-TANKFARM-008-F01.

The Team found there was no documented training for the LMSI staff maintaining the CH2M HILL Engineering records station. During interviews, LMSI management stated that informal training was provided, and the Team found LMSI staff demonstrated knowledge of record management requirements. However, there was no record of the informal training or the establishment of any required training, formal or informal. This issue is described in Observation A-06-ESQ-TANKFARM-008-O01.

The procedure did not provide or reference to processes for all the activities required to be addressed. Specifically, the procedure did not address control of unauthorized access, replacement of records if lost or stolen, location and description of record stations, indexing, filing systems, and superseded records. The Team found that because the procedures failed to identify processes for record indexing and control of access, both record areas were applying informal indexing systems and were not applying any formal controls for checking out records. The record handling procedure failed to provide a complete roadmap of responsibilities and processes to be applied.

Assessment

During three years preceding the assessment, CH2M HILL conducted no independent assessments of either document control or records management, although it did conduct 13 management assessments on these topics.

The Team reviewed a sample of six of the management assessments of records management conducted by several different CH2M HILL organizations and found that they did not address the requirement to establish adequate record classification and retention schedules in RIDS. Checklist questions were only concerned with assuring all records were identified in the RIDS and maintained as the RIDS indicated. However, classification is a key point for potential failure in the records management process.

2.0 Findings and Observations

Finding: A-06-ESQ-TANKFARM-008-F01 – Contrary to the requirements of Section 17.2.4 of the QAPD, CH2M HILL personnel used an uncontrolled, draft LMSI directive to incorrectly classify some records. This could have allowed premature destruction of records.

Requirements:

1. TFC-PLN-02, Revision C-1, “Quality Assurance Program Description” (QAPD), Section 17.2.4 stated: “Records shall be classified as lifetime or nonpermanent ... Lifetime records are required to be maintained for the life of the particular item while it is installed in the facility or store for future use ... Documents that do not meet the requirements for lifetime records, but provide evidence that the QA program has been properly executed, shall be classified as non-permanent records;”
2. TFC-BSM-IRM-DC-C-02, Revision C-7, “Records Management,” Attachment C, Paragraph 1 stated, “Quality assurance records are classified as “lifetime” or “nonpermanent” by the cognizant document owner or their agent ...”
3. QAPD, Section 6.2.1 stated: “Documents, including changes thereto, shall be reviewed for adequacy and approved for issue by authorized personnel;”
4. The QAPD listed the retention requirements of NQA-1 for lifetime and non-permanent records. The QAPD implemented classification guidance of Appendix 16A-1, NQA-1-2000 and also applied the list of records types that should be considered as lifetime QA records; and
5. QAPD, Section 6.2.1 states: “Documents, including changes thereto, shall be reviewed for adequacy and approved for issue by authorized personnel.”

Discussion: Contrary to these requirements, the document management process applied by CH2M HILL and LMSI personnel established categories of record material that failed to specify the correct records retention periods. Using an LMSI directive, personnel classified record material as non-record, record, QA record, and vital record. This system did not distinguish between lifetime QA records and non-permanent QA records as required by Section 17.2.4 of the QAPD and Attachment C of TFC-BSM-IRM-DC-C-02. As a result, some records were classified as just records that should have been classified as lifetime or nonpermanent QA records. Also, the LMSI directive contained language discouraging classifying record material

as QA records. The Team found that assessment reports, records of analytical activities, and other quality-related documents were not classified as “QA record” material.

The LMSI directive was entitled the “Information Inventory Process User’s Guide,” but it had no document number. CH2M HILL personnel classifying records and LMSI personnel assigned to assist CH2M HILL personnel used the LMSI guide even though the CH2M HILL procedure, TFC-BSM-IRM-DC-02, “Records Management,” specified differently how records were to be classified. Also, the copy of the LMSI directive provided to the Team was marked “draft,” although CH2M HILL management later provided an approved copy.

Examples of record material that could be incorrectly scheduled for premature destruction included procurement specifications and purchase orders for nuclear grade equipment. The guidance of NQA-1-2000, Appendix 16A-1 identifies these as lifetime records, but the LMSI process followed by some CH2M HILL employees would have allowed them to be destroyed six years and three months after payment.

There is no reason to believe any records were actually destroyed prematurely because, at the time of the assessment field work, a court-mandated moratorium on destruction of records prevented destruction of any CH2M HILL records.

Finding: A-06-ESQ-TANKFARM-008-F02 – Contrary to the requirements of the Fluor Federal Services document control procedure Number 134 500 8420, the construction contractor used uncontrolled documents for work.

Requirement: Fluor Federal Services Practice 134 500 8420, “Document Control,” dated May 10, 2000, Section entitled, “Controlled Document Distribution and Verification,” stated, “Uncontrolled copies may be distributed for information. Such documents are for reference use only and may not be used for work performance...”

Discussion: Contrary to this requirement, when FFS received released documents, such as drawings and ECNs, from CH2M HILL they issued uncontrolled documents to the craft for use in the field. Only one controlled copy was generated, which was maintained in the custody of the Construction Engineer in the trailer. All other copies issued by the document control clerk were uncontrolled copies, including those used by the craft to perform work.

An example was ECN-724116, which was released by CH2M HILL to FFS to support work at 241-C-108. In a meeting with the Document Control Clerk, FFS Quality management, the FFS Site Superintendent, and the FFS Construction Engineer, FFS management stated that the only controlled copy would be held by the Construction Engineer. They considered that if the craft checked their documents against the Construction Engineer’s copy every day, they met the intent of the procedure. This is an interpretation of the procedure not supported by the requirements of the procedure itself.

Finding: A-06-ESQ-TANKFARM-008-F03 – Contrary to the requirements of TFC-BSM-IRM-DC-C-02, Section 4.2.1, some local record handling procedures did not implement all specified record handling requirements.

Requirements:

1. TFC-BSM-IRM-DC-C-02, “Records Management,” Revision 6, Section 4.2.1, Item 3 required managers to “Develop a record handling procedure in accordance with TFC-BSM-AD-C-01, ensuring that any section to be written or revised for insertion in Tank Farm Contractor procedures includes the applicable requirements and appropriately implements the records management requirements listed below by inclusion or reference to this procedure:
 - Distribution, handling, and control of each record;
 - Identification of indexing, retention, classification and location;
 - Protection and management of quality assurance records;
 - Replacement of records should damage or loss occur;
 - Measures ensuring that unauthorized access are controlled, including storage of in-process records in a secured area; and
 - Appropriate controls for record, quality assurance record, and vital record material have been applied as outlined in Section 4.2.2.”
2. TFC-BSM-IRM-DC-C-02, Section 4.2.2 stated, “Establish, implement, and maintain the following for all types of record material:
 - A description of the storage facility;
 - A filing system;
 - A method to verify documents received are in agreement with the transmittal document and are legible;
 - Rules governing access to and control of files;
 - A method for maintaining control and accountability for records removed from the files; and
 - A method for filing supplemental information and disposing of superseded records.”

Discussion: Contrary to these requirements, the records handling procedures at several records management stations did not address some required topics. Specifically:

- The procedure used by the Independent Assessment organization (TFC-ESHQ-AP-D-04) did not address indexing;

- The procedure used by WFO Technical Data Service Center in 272-AW (TFC-BSM-IRM-DC-C-06) did not address replacement of lost or damaged records, provide a description of the storage facility, describe a filing system, specify personnel verify documents received are legible, provide a method for filing supplemental information, or provide a process for disposing of superseded records;
- The LMSI station managing CH2M HILL records in the 2750 D wing (RIM-106) did not specify or reference processes for record classification and retention. Also, it did not identify the location of records and did not discuss or reference processes for replacement of lost or damaged records; and
- The procedure used for records management for ATS (ATS-MP-1005) did not specify a process for replacement of lost or damaged records, identify the location of all record stations, specify access controls, or provide a filing system.

Finding: A-06-ESQ-TANKFARM-008-F04 – Contrary to the requirements of TFC-ENG-SB-C-03, the Radiological Control Instructions manual and manual changes were not subject to the required USQ process.

Requirements:

1. 10 CFR 830.203, “Unreviewed Safety Question Process” states, “The contractor responsible for a hazard category 1, 2, or 3 DOE nuclear facility must implement the DOE-approved USQ procedure in situations where there is a ... Temporary or permanent change in the procedures as described in the existing documented safety analysis ...”
2. RPP-MP-003, Revision 5, “Integrated Environment, Safety, and Health Management System Description for the Tank Farm Contractor,” Section 4.6.2, stated, “Proposed changes to the facility or operations are evaluated through the Unreviewed Safety Question process ...;” and
3. TFC-ENG-SB-C-03, Revision D-1, “Unreviewed Safety Question Process,” Section 4.1 stated, “The USQ process will be entered as directed by implementing procedures for change processes, upon notification from the facility managers, or designees prior to conducting tests or experiments not described in the DSA, and upon notification from the facility managers or designees of a PISA.”

Discussion: The Radiological Control organization did not obtain USQ screens for RPP-5779, “Radiological Control Instructions,” or changes to this manual. There was no categorical exclusion for the Radiological Control Instructions, and the manual was not listed in RPP-27195, “Tank Farm Contractor Out of Scope Documents.” Listing in RPP-27195 exempted documents and their changes from the USQ process. When this problem was brought to the attention of CH2M HILL management, they promptly initiated action to analyze RPP-5779 for listing in RPP-27195.

Finding: A-06-ESQ-TANKFARM-008-F05 – Contrary to the requirements of TFC-PLN-05, a Closure Operations round sheet book contained an uncontrolled operator aid.

Requirements:

1. TFC-PLN-05, Revision B-15, "Conduct of Operations Implementation Plan," Section 3.2.4 stated, "The shift manager will maintain the program and will approve tank farm operator aids;" and
2. TFC-OPS-OPER-C-41, Revision A-1, "Operator Aids," Section 4.1.2, stated, "Submit the completed Operator Aid Request and Approval Sheet to Waste Feed Operations/Closure Operations (WFO/CO) Shift Operations/242-A Evaporator Operations."

Discussion:

Contrary to these requirements, a Closure Operations operator round sheet book contained one page of an outdated procedure to operate some Tank Farms equipment. The page described an operator routine and constituted an operator aid as defined in TFC-PLN-05.

The outdated procedure page was apparently kept in the round sheet book for two and a half years during a period when the procedure from which it came was changed and revised seven times. The procedure, TO-060-262, "Operate TK-244-TX Exhauster," was marked "TSR Compliance" and "Continuous Use." The operator routine addressed by the procedure page was to drain the exhauster stack. The exhauster was removed from service in June 2006, but the procedure page was never removed from the operations round sheet book.

CH2M HILL management said they interviewed operators and concluded the page was not used recently for operating equipment. Instead, operators obtained current procedures from the network to perform the routine in accordance with the CH2M HILL document control procedure. However, CH2M HILL management did not have an explanation regarding why the procedure page was present in the round sheet book at the time of the assessment.

Observation: A-06-ESQ-TANKFARM-008-001 – Training requirements for Records Management Custodians should be specified.

Discussion: TFC-BSM-IRM-DC-C-02, "Records Management," Revision 6, Section 3.2, Item 3, stated "[Managers ensure] employees responsible for generating, processing, protecting, and storing records receive proper training," but the procedure did not specify minimum acceptable training. The training established for record coordinators varied, ranging from on-the-job training on the record handling procedure used at a particular records station, to reading assignments, and to classroom training provided by LMSI. The level of understanding of the records management requirements varied from that required to simply perform the duties specified in the applicable records handling procedure to a working knowledge of the entire CH2M HILL records management process and all related procedures. As identified elsewhere in this procedure, CH2M HILL had performance weaknesses in records management. If CH2M HILL defines appropriate minimum training requirements based on the records management processes, performance will improve.

Observation: A-06-ESQ-TANKFARM-008-002 – Clarity of the Records Management procedure could be improved by defining terms of required activities.

Procedure TFC-BSM-IRM-DC-C-02, “Records Management,” did not adequately define terms with unique meanings to activities it specified for handling records. For example, the procedure required “indexing” and “classification” but failed to define these terms. The procedure also failed to provide criteria for these activities. All record stations performed a function they considered as indexing, but each applied a different method. Most did not satisfy the criteria and examples of indexing provided in the NQA-1-2000, Appendix 16A-1 non-mandatory guidance.

3.0 Conclusion

The Team found that, with the exception of the conditions identified in the Findings, CH2M HILL implemented programs for the control of documents and records that conformed to the QAPD and other contract and regulatory requirements. Requirements were implemented in procedures, and personnel usually followed the procedures. With the exception of the conditions noted in the Findings, documents in the field were controlled, and records were managed. The Team considered the CH2M HILL document control and records management programs were improved over the conditions reported in ORP Assessment A-03-ESQ-TANKFARM-003 of May 2003, but more improvement is required.

Items Opened, Closed, and Discussed

Opened

A-06-ESQ-TANKFARM-008-F01: Finding	Contrary to the requirements of Section 17.2.4 of the QAPD, CH2M HILL personnel used an uncontrolled, draft LMSI directive to incorrectly classify some records. This could have allowed premature destruction of records.
A-06-ESQ-TANKFARM-008-F02: Finding	Contrary to the requirements of the FFS document control procedure Number 134 500 8420, the construction contractor used uncontrolled documents for work.
A-06-ESQ-TANKFARM-008-F03: Finding	Contrary to the requirements of TFC-BSM-IRM-DC-C-02, Section 4.2.1, some local record handling procedures did not implement all specified record handling requirements.
A-06-ESQ-TANKFARM-008-F04: Finding	Contrary to the requirements of TFC-ENG-SB-C-03, the Radiological Control Instructions manual and manual changes

were not subject to the required USQ process.

A-06-ESQ-TANKFARM-008-F05: Finding

Contrary to the requirements of TFC-PLN-05, a Closure Operations round sheet book contained an uncontrolled operator aid.

A-06-ESQ-TANKFARM-008-O01: Observation

Training requirements for Records Management Custodians should be specified.

A-06-ESQ-TANKFARM-008-O02: Observation

Clarity of the Records Management procedure could be improved by defining terms of required activities.

Closed

None

Discussed

None.

Signatures

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