



U.S. Department of Energy

~~OFFICE OF RIVER PROTECTION~~

P.O. Box 450, MSIN H6-60  
Richland, Washington 99352

**MAY 18 2006**

06-TOD-030

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

Dear Mr. Spears:

CONTRACT NO. DE-AC27-99RL14047 – U.S. DEPARTMENT OF ENERGY, OFFICE OF RIVER PROTECTION (ORP) TANK FARM OPERATIONS DIVISION (TOD) QUARTERLY REPORT COVERING TANK FARM CONTRACTOR OPERATIONS DURING THE SECOND QUARTER OF FISCAL YEAR 2006

The ORP TOD Facility Representatives and Technical Staff conducted evaluations of the CH2M HILL Hanford Group, Inc., Tank Farm operations during January, February, and March 2006. The attached quarterly report documents the results of the evaluations conducted in four subject areas: Conduct of Engineering, Electrical Safety, Job Hazard Analysis Compliance, and 242-A Evaporator Cold Run Operations.

If you have any questions, please contact me, or you may contact Mark Brown, Director, Tank Farm Operations Division, (509) 373-9150.

Sincerely,

T. Zack Smith,  
Contracting Officers Representative

TOD:MCB

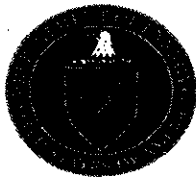
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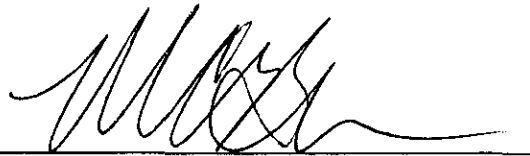
**Tank Farms Operations Division**  
**Quarterly Report**  
  
Second Quarter  
January, February and March 2006



ORP MISSION

Retrieve and treat Hanford's tank waste and close the tank farms to protect the Columbia River.

U.S. Department of Energy  
Office of River Protection  
Tank Farms Operations Division  
Quarterly Report  
Second Quarter  
January, February and March 2006



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## 1. EXECUTIVE SUMMARY

The U.S. Department of Energy (DOE), Office of River Protection (ORP), Tank Farm Operations (TOD) Division Facility Representatives (FR) and Technical Staff completed scheduled and reactive reviews of the Tank Farm Contractor (TFC) and Analytical Services Production Contractor activities and operations at TFC managed facilities during the months of January, February and March 2006. The reviews conducted during the quarter were focused on evaluating contractor activities, operations and continuous improvement efforts in the following areas: Conduct of Engineering, Electrical Safety, Job Hazard Analysis (JHA) Compliance, and Evaporator Cold Run Operations. Additionally, TOD staff conducted a review of the TFC Industrial Hygiene Program, relating to closure of Findings identified by DOE Headquarters, and associated with TFC efforts to downgrade personal protective equipment requirements in the A-Prefix Tank Farms. Below is a summary of the results; detailed results are provided in Section 2.0 of this report.

### **Conduct of Engineering:**

During the second quarter of Fiscal Year (FY) 2006, FRs reviewed CH2M HILL Hanford Group, Inc. (CH2M HILL) Conduct of Engineering. The objective of the review was to evaluate the effectiveness of the contractor's engineering program as implemented in the field. The review found that the engineering program is effectively implemented in the field. Examples of equipment fit-up problems have been identified in the past; however, no common causes for these problems were identified by the contractor and the FRs. Engineering expertise was available when requested and engineering involvement was observed during almost all of the evolutions observed during this review.

### **Electrical Safety:**

Contractor performance in the area of Electrical Safety was determined to be adequate and improving. CH2M HILL has recognized that their day-to-day activities do not consistently meet their own electrical safety requirements and they are starting on the path to improve their performance. Standards have been developed and are in the process of continuous improvement. Electrical safety deficiencies are being identified by both the contractor and the FRs, and are being corrected. Additional improvement is warranted both in the involvement of the contractor's Electrical Safety Committee and in addressing legacy electrical safety issues.

### **Job Hazard Analysis Compliance:**

Some improvement has been noted in JHA development, worker involvement, and in JHA compliance, as a result of Integrated Safety Management System (ISMS) reviews of the contractor in 2005, FR observations relative to JHA compliance, and contractor initiatives. However, FR observations and issues noted during the quarter, and an injury that occurred

during the quarter indicate that problems continue to exist in JHA development, translation of controls into work instructions, and adherence to controls. Based on the issues identified by FRs this quarter and events that have occurred, additional emphasis is needed in this area to improve consistent adherence to job hazard controls.

### **Evaporator Cold Run Operations:**

TOD FRs and technical staff performed a review of the 2006 242-A Evaporator Cold Run (06-CR). The review included an evaluation of pre-campaign preparations and field observations during the cold run. The review found the contractor's performance prior to and during the campaign adequately met the campaign objectives. Although some issues were identified by both the contractor and DOE during the campaign, actions taken in response to the identified issues were determined to be adequate. TOD staff determined that the preparations for the cold run were effective. They also found the conduct of training and command and control during the cold run adhered to high standards of Conduct of Operations and ISMS expectations.

### **Industrial Hygiene Program**

TOD staff evaluated the TFC's Industrial Hygiene (IH) Program, as it applies to corrective actions taken in response to the DOE Office of Independent Oversight and Performance Assurance (OA) investigation conducted in April 2004. The assessment team found the TFC had rigorously and thoroughly analyzed and documented vapor concentrations in the tanks' head space and various work zones in the A-Prefix Farms. A well documented set of administrative control zones (Vapor Control Zones) for the various Tanks in A- and AX-Farms had been established and were in the process of being established in the other A- Prefix Farms. The assessment team determined the controls established by the TFC, if followed, would provide the tank farm workers adequate protection from tank vapors. Supplied air respirators will be required in all other tank farms until the contractor has implemented a complete set of corrective actions for those tank farms and DOE has verified the effectiveness of those corrective actions. ORP reviewed documentation and other information and closed five of the six OA Findings. The last Finding relating to the use of engineering controls for mitigating the chemical hazards associated with tank vapors is closed for the A-Prefix Farms. The use of engineering controls remains open.

## **2. QUARTERLY PERFORMANCE EVALUATION**

### **Review Scope and Method**

The ORP FRs completed evaluations of operations and activities at CH2M HILL managed facilities during the second quarter of fiscal year 2006, covering the months of January, February and March 2006. The evaluations conducted during the quarter were focused on evaluating contractor continuous improvement in the following areas:

- Conduct of Engineering
- Electrical Safety
- Job Hazard Analysis Compliance
- Evaporator Cold Run Operations

The results of the FR reviews were provided to CH2M HILL management periodically during the quarter both verbally and via the Tank Farm FR Weekly Reports. The FR issues identified in these reports were also discussed with CH2M HILL management at the monthly interface meetings conducted on February 6, March 6, and April 3, 2006. Refer to section 3.0, *Facility Representative Issues*, for a listing of FR issues identified during the quarter. Additionally, TOD staff conducted a review of the TFC Industrial Hygiene Program, relating to closure of Findings identified by DOE Headquarters, and associated with TFC efforts to downgrade personal protective equipment requirements in the A-Prefix Tank Farms.

## EVALUATION RESULTS

### Conduct of Engineering

During the second quarter of FY 2006 the ORP FR's observed CH2M HILL Conduct of Engineering. The objective of the review was to evaluate the effectiveness of the contractor's engineering program as implemented in the field.

The FR review included document reviews, interviews, and observations of work in progress. This included review or oversight of:

- RPP-7838, *241-AN Transfer Line SN-630 Acceptance Test Report*
- RPP-7840, *241-AP Transfer Line SN-634 Acceptance Test Report*
- RPP-7846, *241-AN Transfer Line SNL-3150 Acceptance Test Report*
- Ventilation jumper installation at 244-A filter pit
- Technical basis for testing lines SN-269 and SL-167
- System design changes to correct problems encountered during the 38B test melt
- Discussion with Transfer Engineering on AN and AP valve operation problems
- Placement of the new C-103 slurry pump
- Response to C-103 retrieval shutdown due to a Material Balance Discrepancy calculation out of tolerance
- Demonstration Bulk Vitrification System Design Review
- Material Balance Discrepancy rebaselining on the AN-106 to AW-106 transfer
- Engineering evaluation of Catch Tank ER-311 as a potential leaking tank
- Work planning and initial field activities to pump Catch Tank ER-311
- Engineering evaluation of options to address Catch Tank ER-311

- Engineering evaluation of Catch Tank UX-302A as a potential leaking tank
- Engineering evaluation of the UX-302A ENRAF calibration records

The results of the oversight of the activities above were considered in the evaluation of Conduct of Engineering. During the review, the FRs evaluated the engineering organizational structure and the process established to obtain engineering assistance in resolution of operational or safety problems or issues.

The review found that the engineering program is effectively implemented in the field. Engineering expertise was available when requested and engineering involvement was observed during almost all of the evolutions listed above.

FRs did note cases of improper fit of equipment. This included a new ventilation system jumper at 244-A, a new waste jumper in the AP Valve Pit, and the reference heights used for the installation of the condenser drain line to AZ-301 and for the ENRAF on ER-311. Although not as recent, the first replacement EC-2 and EC-3 condensers at the 242-A Evaporator also did not fit. These errors raised questions about in-field measurements, accuracy of fabrication, and accuracy of as-built drawings and quality review of engineering work.

Contractor engineering personnel reviewed the specific cases above as they occurred and did not find a consistent cause. While no one fix could be applied to prevent future occurrence, ORP notes that a timely and thorough peer review can prevent many problems prior to equipment construction.

In summary, the review found that the engineering program is effectively implemented in the field. Examples of equipment fit-up problems have been identified in the past; however, no common causes for these problems were identified by the contractor and the FRs. Engineering expertise was available when requested and engineering involvement was observed during almost all of the evolutions listed above.

### **Electrical Safety**

DOE-ORP, FR's evaluated the CH2M HILL actions regarding electrical safety this quarter. The FR review consisted of observing the contractor's work in the field, reviewing the procedure revision process, and reviewing the related occurrence reports, problem evaluation requests, root cause analysis, and corrective action plans. The following areas were reviewed:

- Electrical Safety Issues Identified this Quarter
- Electrical Safety Assessment Corrective Action Plan
- Legacy Electrical Safety Issues
- Electrical Authority Having Jurisdiction (AHJ) and Safety Committee
- Observed Contractor Actions



During the quarter, the FRs found numerous electrical safety issues that were promptly corrected by the contractor. Mostly these issues involve energized extension cords left in the field that are no longer in use. This issue was pointed out numerous times in the past six months and conditions in the field still persist. There were electrical safety issues at the Tank Farms that had the potential for fires or electric shock. Also during this time there was an electrical fire on the Hanford site (not in Tank Farms) directly caused by overheating of daisy-chained power strips, demonstrating the need for adherence to electrical safety standards.

The FRs identified a fire hazard in the change tent on the Northwest side of C Farm. This tent had not been used for approximately four months. Because the doors had not been shut tumbleweeds accumulated underneath the electric space heaters. These heaters were energized. The heat shields were designed to prevent larger objects from touching the heating elements however, tumbleweeds could get past the heat shields and touch the heating elements causing a potential for fire. The contractor promptly removed the tumbleweeds, secured power to the space heaters and cleaned up the change tent. Three weeks later the FR found more tumbleweeds in the change tent. The contractor removed these tumbleweeds. Two weeks after this the FR found tumbleweeds blown into the tent that had come in contact with the space heater elements. This illustrates that had power not been secured to the space heaters a fire would have almost certainly occurred. This also shows a tendency by the contractor to fix the immediate problem and not solve why the problem occurred, in this case securing the doors to the change tent.

Other electrical safety events occurred during the quarter. One event had the potential for personnel contacting live conductors and the other for an electrical fire. CH2M HILL identified the events and took appropriate corrective action. The events were:

- Construction personnel working in an excavation in AN Farm found an electrical cable which was missing approximately 6 inches of insulation.
- S-112 CAM cabinet heaters malfunctioned causing the cabinet to overheat and melt plastic parts and caused some electrical insulation to become brittle.

CH2M HILL committed to ORP to be complete with the corrective actions from the August 2005, ORP Electrical Safety Assessment by March 31, 2006 or reply by a formal letter why these actions had not been completed and provide the plan for completion. As of the second week in April 2006, ORP has not received a letter. Through consultation with the Electrical AHJ, the Electrical Safety Officer has confirmed at least two of the corrective actions had not been completed.

One of the corrective actions was a revision to the TFC's Electrical Safety Standards. The contractor did revise this Standard but the revision only addressed individual issues and not a thorough review as identified in the assessment. This issue has been discussed with the

Electrical AHJ and they have committed to revise the Electrical Safety Standard to correct the issue.

There are numerous electrical equipment deficiencies that are safety issues. These issues have been identified in the past. The contractor used the National Electrical Code (NEC) inspector to verify that these were actual safety deficiencies. However, they were not identified as safety issues in the work control system and therefore got assigned to a low priority. Because of this, most of the issues have never been worked and some of the work packages have been deleted. This issue has been discussed with the Electrical AHJ and they are taking actions to correct the situation.

Following up on a previously identified contractor issue in building 272-AW, the FR observed that the electrical shop panelboard D dead front was not completely flush with the panel cabinet, leaving a gap greater than half an inch. This was identified in the Tank Farm Occupational Safety and Health Baseline Compliance Assessment dated August 2001 and verified by NEC inspection, Report # 7585, dated April 2002. This is an example of a verified electrical safety problem that has not received enough priority to be repaired.

The FR identified during the AN Farm strip wire event that the Electrical AHJ and Electrical Safety Committee have not been involved in investigation of electrical safety issues. This is required by the Electrical Safety Committee Charter. The contractor is currently changing the investigation process to correct this issue.

The Electrical AHJ and Electrical Safety Committee is a brand-new function for this company. They are still working out where they fit into the culture and how to work well together. The Electrical AHJ and Electrical Safety Committee recognized the challenges before them and are committed to resolving the problems and make Tank Farms an electrically safe place to work.

The FR's observed contractor activities to clean and inspect the electrical switchgear in A & AX Farm. Both these activities were performed professionally with all hazards identified and controlled.

CH2M HILL has instituted a policy that the job site is cleaned up before the work teams leave the area. This will prevent the accumulation of extension cords and other unwanted materials inside the Tank Farms. Also in response to the identified electrical issues throughout the Tank Farms the contractor has performed general housekeeping sweeps through C, AP and AW Farms with more planned on the regular and ongoing basis. Both these actions should clean up older legacy issues and prevent new issues from arising in the future.

In summary, CH2M HILL through the action of the FR's, has recognized that their day-to-day activities do not consistently meet their own electrical safety requirements and they are starting on the path to improve their performance.

## Job Hazard Analysis Compliance

In the October 2005 review of the TFC's ISMS, the review team observed instances where workers were not complying with the requirements of the JHA. During the second quarter of FY 2006, DOE-ORP Facility Representatives observed operations and work activities to evaluate the effectiveness of contractor efforts to improve compliance with JHAs.

As a result of the ISMS reviews of the contractor in 2005, FR observations relative to JHA compliance, and contractor initiatives, some improvement has been noted in JHA development, worker involvement, and in JHA compliance. The investigation following an injury this quarter determined inadequate JHA for the work scope. Additionally, issues identified by FRs this quarter indicate that additional emphasis is needed in this area to improve consistent adherence to job hazard controls.

FRs routinely attended contractor work planning meetings and observed adequate employee involvement in hazard analysis and control development. Planning meetings identified work at the task level, and included an evaluation of each task for hazards. Controls were then developed commensurate with the hazards identified. Field reviews of work in progress generally indicated that job hazard controls were being implemented at the worker level. However, some deficiencies were identified.

In a January 2006 injury event, a carpenter injured his hand while using a router. The contractor investigation team determined that the JHA for the "activity was broad and did not appear to adequately include specific hazards for carpenter shop equipment and was not specific enough to cover the hazards and associated controls that should be used for individual pieces of shop equipment that have their individual hazard considerations." The contractor developed adequate corrective actions following this event.

Examples of inadequate implementation of job hazard controls identified by the FRs during the quarter included:

- Improper use of step ladders
- Inadequate atmosphere monitoring and ventilation during a nitrogen purging activity
- Inadequate Personal Protective Equipment (PPE) (non-use of safety shoes during drum handling), contrary to requirements specified during the pre-job brief
- A pre-job brief that did not adequately cover PPE requirements
- Work documents did not adequately contain PPE requirements

In summary, some improvement has been noted in JHA development, worker involvement, and in JHA compliance, as a result of ISMS reviews of the contractor in 2005, FR observations

relative to JHA compliance, and contractor initiatives. However, FR observations and issues noted during the quarter, and an injury that occurred during the quarter indicate that problems continue to exist in JHA development, translation of controls into work instructions, and adherence to controls. Based on the issues identified by FRs this quarter and events that have occurred, additional emphasis is needed in this area to improve consistent adherence to job hazard controls.

### **Evaporator Cold Run Operations**

TOD performed oversight of the 2006 242-A Evaporator Cold Run (06-CR). The scope of that review was divided into two parts: 1) a pre-campaign review, and 2) an in-process review. The purpose of the pre-campaign review was to evaluate the contractor's readiness to perform the campaign by reviewing the areas of personnel, equipment and procedures. The purpose of the in-process review was to evaluate the contractor's performance during the campaign and to provide DOE oversight.

The pre-campaign consisted of evaluating the areas of personnel, equipment and procedures. The in-process review consisted of observing the campaign from start to finish on a periodic basis, performing reviews of selected operator stations, surveillance data, alarm logs, and procedure adequacy and field conditions.

The 06-CR was a cold run. A cold run was performed to maintain proficiency of the qualified operators and to give trainees the opportunity to run the system under the instruction of qualified personnel. During a cold run, no tank waste is fed to the 242-A facility. Instead, raw water is used in place of tank waste as the operators fill the vessel, start the recirculation pump, bring on vacuum, apply heat and boil off the water. The previous Evaporator Campaign (05-01) was a hot run, and was completed on March 30, 2005. A hot run is planned for the last quarter of FY06.

Prior to the start of the cold run, the 242-A Documented Safety Analysis, Technical Safety Requirements (TSR) and Fire Hazard Analysis were updated to reflect the decreased mass of combustibles in the Pump and Evaporator rooms. This was driven by a revision to the bounding fire accident scenario and TSR level fire protection controls for combustible materials. The mass of combustibles in these rooms was reduced from 1530kg (primarily wood scaffolding) to less than 500kg (wood equivalent).

The 06-CR mode change from SHUTDOWN to OPERATION took place on March 22, 2006. The change from OPERATION to SHUTDOWN mode took place on April 5, 2006.

The pre-campaign review consisted of a review of procedures to be used in the cold run, requirements applicable to the cold run, and training records. FRs monitored maintenance activities leading up to the mode change from shutdown to operate. TOD personnel attended management meetings where the contractor evaluated their own readiness to begin the campaign,

and the pre-job briefing prior to mode change. The FRs also provided oversight of the combustible material removal that was done prior to beginning the campaign.

The in-process review consisted of observing the campaign from start to finish on a periodic basis, performing observations of selected operator stations, surveillance data, alarm logs, and procedure adequacy and field conditions. Post drill reports were also reviewed.

**The contractor's preparations for the cold run were effective.** Well defined management expectations and a methodical approach to startup resulted in improved consistency of facility operation.

Waste Feed Management set expectations for: normal, abnormal, and emergency simulations, trainee watch-standing, and restart after unplanned events. Examples where these expectations were met were noted for each of these areas.

An effective start up methodology was noted to authorize the change to Operation Mode. The *242-A Evaporator Campaign Plan: 2006 Cold Run* laid out a methodical approach to get to the mode change, and documented evidence of completion. A new procedure (TO-600-005) was used to ensure all required plant operating equipment has been identified and is in-service or an alternate identified. The creation and use of this procedure arose from lessons learned from the 05-01 campaign where consolidation of multiple requirement sources was identified as a potential improvement.

**The contractor's conduct of training, and facility command and control, during the cold run demonstrated adherence to high standards of Conduct of Operations and ISMS expectations.** Control of On-shift training was performed in accordance with Conduct of Operations principles and the Training Plan. Trainees on shift were always seen accompanied by, and receiving attentive coaching from a qualified operator while they acquired the required hands-on experience.

ISMS expectation E4; Demonstrate a questioning attitude, was noted in the context of facility access control. An Operator demonstrated a questioning attitude regarding a manager's certification for entering the condenser room. It turned out the manager had not ACED in and was not allowed to enter the condenser room.

**No new issues are identified in this report.** The discussion below covers contractor identified issues that were monitored during the review and one FR issue that has been addressed prior to this report.

The FRs followed a 242-A identified issue that arose from process condensate filter housing valve replacements as part of the maintenance leading up to the start of the cold run. Following the valve replacements, an inadvertent drainage of approximately 300 gallons of process

condensate to Tank AW-102 occurred. A fact finding was held for this event and was attended by the FR. The 242-A personnel were briefed on the deficiencies that led to this event prior to entering operations mode. The FR interviewed several 242-A personnel following this event and found their knowledge of what went wrong to be very good. **The issue is documented in PER-2006-0494.**

One issue was identified by TOD personnel during the 06-CR involving inadequate incorporation of PPE (face shield) requirements into the first level of work documents during steam valve manipulations. This issue was immediately addressed by updating the work documents to include the controls. The issue was ultimately addressed with a re-evaluation of the hazard control which resulted in the removal of that specific PPE requirement. **This issue has already been documented in PER-2006-0658, no additional actions are required.**

During the cold run, restart of the process condensate transfer from 242-A to the Liquid Effluent Retention Facility (LERF) basins was inadvertently blocked by a valving change at LERF. This condition was caught by 242-A personnel. LERF is operated by Fluor Hanford, Inc. (FHI) under the Richland Operations Office, and the interface with the 242-A evaporator is governed by an Interface Control Document (ICD), HNF-3395. The error resulting in a blocked transfer path was on the part of LERF, not 242-A, and FRs confirmed this by discussions with both parties. Corrective actions for the deficiency at FHI are under their jurisdiction and are underway. From review of log entries and discussions with the involved personnel it appeared that 242-A personnel made the appropriate notifications per the ICD.

The review found that the contractor's performance prior to and during the campaign adequately met the campaign objectives. Although some issues were identified by both the contractor and DOE FRs during the campaign, actions taken in response to the identified issues were determined to be adequate. The FRs determined that the preparations for the cold run were effective. The FRs also found the conduct of training and command and control during the cold run adhered to high standards of Conduct of Operations and ISMS expectations.

### **Review of Tank Farm Contractor Industrial Hygiene Program**

From March 27, 2006, to April 7, 2006, DOE-ORP evaluated the TFC Industrial Hygiene Program, as it applies to corrective actions taken in response to the DOE Office of Independent Oversight and Performance Assurance (OA) investigation conducted in April 2004. The objectives of this assessment were to verify the TFC had adequately characterized the vapors of the 177 underground waste storage tanks and the TFC through its IH Program had implemented sufficient controls and processes to protect the workers from the chemicals in the tank vapors. This review evaluated the implementation of corrective actions to established "effectiveness criteria." ORP developed its effectiveness criteria from the issues and Findings documented in the April 2004 investigation by OA.

While the OA Findings applied to all the Hanford Tank Farms and CH2M HILL is committed to implementing corrective actions on a tank farm by tank farm basis, the ORP assessment team focused its review on the TFC actions associated with the A-prefix Tank Farms, based on the TFC intent to change the respiratory protection requirements for the A-Prefix Tank Farms. In the future, the TFC plans to implement corrective actions similar to those taken in the A-Prefix Tank Farms for the remainder of the tank farms.

The assessment team found the TFC had rigorously and thoroughly analyzed and documented vapor concentrations in the tanks' head space and various work zones in the A-Prefix Farms. A well documented set of administrative control zones (Vapor Control Zones) for the various Tanks in A- and AX-Farms had been established and were in the process of being established in the other A- Prefix Farms. The majority of the A-Prefix Farm areas will be designated as Safe Zones or areas where respiratory protection will not be required. Workers will not be required to wear respiratory protection to accomplish work tasks in the A-Prefix Tank Farms; however, if a worker is concerned about the adequacy of protection he/she may elect to use a supplied air respirator. These controls will provide adequate respiratory protection during periods when no waste disturbing activities are in progress. Supplied air respirators will be required in the A-Prefix Tank Farms during any and all waste disturbing activities until further analysis is completed. The assessment team concluded, if followed, the controls established by the TFC would provide the tank farm workers adequate protection from tank vapors. Supplied air respirators will be required in all other tank farms until the contractor has implemented a complete set of corrective actions for those tank farms and DOE has verified the effectiveness of those corrective actions.

ORP reviewed documentation and other information and closed five of the six OA Findings. The last Finding relating to the use of engineering controls for mitigating the chemical hazards associated with tank vapors is closed for the A-Prefix Farms. The use of engineering controls remains open.

### 3. FACILITY REPRESENTATIVE ISSUES

DOE-ORP FRs identified one Finding and several issues during the quarter. These were previously provided to the contractor via the FR Weekly Reports. The Finding was detailed in the February 16, 2006 FR Weekly Report and is summarized below:

#### **FINDING - Performance Issues Identified with Radiological Work Controls**

(C. Blanchard, February 16, 2006): The FRs identified some recent issues with the planning and field performance related to radiological work control. The FRs determined that the contractor made non-conservative radiological risk ranking determinations in planning complex jobs.

The following table provides a listing of the FR-identified Finding and issues from the quarter.

Issue	FR	Date	PER # (PER-2006-)
Issues with Conduct of Radiological Practices were identified During the C-103 Pump Removal.	Blanchard, Navarro, Yasek	1/19/06	0174 and 0203
Corrective Actions were not thorough to address an injury caused by a loose step on a Tank Farm wooden stairway.	Blanchard	1/19/06	0175
Improper use of a stepladder by an employee at the Integrated Disposal Facility (IDF) construction site.	Sorensen	1/24/06	0275
Draft work instructions presented at a team planning meeting were less than adequate.	Brown	2/6/06	0358
The SNL-3150 nitrogen purging activity outside the 6241-V vent station was not in compliance with the task specific Job Safety Analysis (JSA).	Sorensen	2/9/06	0359
Extension cords that are not being used were left in the field in SY Farm.	George	2/09/06	0360
FINDING - Performance Issues Identified with Radiological Work Controls.	Blanchard	2/16/06	0419
Enhancement for Radiological Work Permits.	Blanchard	2/16/06	0420
The Northwest C-Farm change tent has energized unattended electrical equipment and housekeeping issues.	George	2/13/06	0369
Control of leaking or spilled fuel/oil from powered equipment was not adequate.	Williamson	2/13/06	0421
Poor Housekeeping and Electrical Practices Observed During Tour of C- Tank Farm.	Blanchard	3/3/06	0536
Performance Issues Identified with Radiological Work Controls.	Trenchard	3/10/06	0550



<b>Issue</b>	<b>FR</b>	<b>Date</b>	<b>PER #</b> (PER-2006-)
Occurrence Reporting Procedure Contained Wrong Limits.	Trenchard	3/10/06	0593
A PPE requirement to don face shields for steam valve manipulations was not contained in the job specific work documents.	Williamson	3/16/06	0658
Electrical safety issues have not been corrected.	George	3/16/06	0659
The First Time Use Process allows changes to released work without Shift Manager Review and Approval.	Trenchard	3/23/06	0729
The 241-AN-106 to 241-AW-106 Waste Transfer Procedure was not consistent with the Painted Pit Cover Schematics.	Blanchard	3/30/06	0769