RL-675 (03/99)

United States Government

Department of Energy

Office of River Protection

memorandum

DATE:

FEB 2 6 2007

REPLY TO ATTN OF:

WTP:JEA 07-WTP-040

SUBJECT:

TRANSMITTAL OF THE WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) ENGINEERING DIVISION (WED) INDEPENDENT ASSESSMENT DESIGN OVERSIGHT REPORT - MANAGEMENT SELF ASSESSMENT OF BECHTEL NATIONAL, INC. (BNI) OVERSIGHT PROGRAM AND REVIEW OF BNI EFFECTIVENESS FOR ENGINEERING ACTIONS D-07-DESIGN-037

TO:

John R. Eschenberg, Project Manager for the Waste Treatment and Immobilization Plant

The U.S. Department of Energy, Office of River Protection (ORP) WED has completed an evaluation of the design oversight of BNI in compliance with the ORP M 220.1, Revision 4, and the WED DI 200.1, Revision 1; report D-07-DESIGN-037 is attached. In addition, this oversight reviewed all assessments performed under this program from August 2006 to present, to status issues documented under the program. Implementation of the program is in general compliance with the governing instructions, with the exception of issues identified in the report. The desk instruction requires revision to address management expectations related to performing and documenting WED oversight assessments. Improvements are needed to assure the status of assessment follow-up items in tracking the databases are accurate and current, as well as with the timeliness of Lead Assessor review of contractor responses to follow-up items.

If you have any questions, please contact me, (509) 376-6817.

Sincerely,

Attachment

Lowis F. Miller, Acting Director WTP Engineering Division

THE U.S. DEPARTMENT OF ENERGY (DOE), OFFICE OF RIVER PROTECTION (ORP) DESIGN OVERSIGHT REPORT

WTP ENGINEERING DIVISION (WED) INDEPENDENT ASSESSMENT OF THE WED DESIGN OVERSIGHT PROGRAM

January 19-30, 2006

Design Oversight: D-07-DESIGN-037

Team Lead:

James E. Adams, WTP Design Oversight Engineer

Team Members:

Richard Cooper, ORP WTP Consultant

EXECUTIVE SUMMARY

The U.S. Department of Energy, Office of River Protection (ORP) Waste Treatment and Immobilization Plant (WTP) Project Engineering Division (WED) conducted an independent assessment of its assessment program to verify the WED Design Oversight Program complied with the implementing documents, ORP M 220.1, Integrated Assessment Program, Revision 4, and ORP Desk Instruction (DI) 220.1, Conduct of Design Assessment, Revision 1. In addition, the assessor reviewed the implementation of the WED oversight process of identifying, transmitting, tracking, and closing issues, both to the Contractor and internal to ORP, based on design oversight reports issued from August 25, 2006, to present. Specifically, the following were assessed:

- 1. Compliance of ORP WED Design Oversight Program to ORP M 220.1 and ORP DI 220.1 for all reports issued since July 27, 2006, the date of the last self-assessment.
- 2. Verification that followup items were identified and transmitted to the Contractor, requesting a response.
- 3. Effectiveness of the WED program for tracking assessment issues and acceptability of Contractor corrective actions, and the closure documentation of these corrective actions.
- 4. Placement of assessment issues identified for ORP action in Corrective Action Reporting System (CARS).

CONCLUSIONS

Program Compliance

Implementation of the WED Design Oversight Program was generally in compliance with the governing instructions, particularly relative to planning, performing, and transmitting assessment results to both ORP and the Contractor. However, one example was found in which a completed oversight assessment was not transmitted to the Contractor as required by the DI, as documented in Finding D-07-WED-037-F01. In addition, program implementation was not in compliance with governing instructions relative to entry of followup items into CARS and closure of those items in CARS, as documented in Finding D-07-WED-037-F02. Furthermore, four WED personnel who led oversight assessments were not fully qualified to do so; this was documented in Finding D-07-WED-037-F03. Also, division management had performance expectations for oversight assessments that were not being generally met, including constructing and maintaining "closure books" current and complete. This is because many of these expectations had not been broadly communicated by management nor documented in the governing instructions. This, and the need to further revise the desk instruction for inclusion of the actions, is being tracked under Observation D-07-WED-037-O04.

Tracking of Assessment Followup Items

WED oversight assessments and followup items are required to be entered and tracked in CARS. The CARS database is used to generate reports that are reviewed by division management with

status updates at regular intervals. This mandates information in the CARS database be accurate and current – the person with vested interest in assuring this should be the assigned Lead Assessor. However, weakness in ownership of WED assessments by assigned WED Leads contributes to problems with the database. This is being tracked under Observation D-07-WED-037-O04.

Timeliness and Adequacy of Followup Item Closure

Lead Assessors are not always timely in evaluating and documenting the adequacy of Contractor responses to followup items in their oversight assessments. In addition, Division management does not emphasize to the Leads the importance of timely review of outstanding actions from oversight assessments. This is being tracked under Observation D-07-WED-037-O04.

The prior self-assessment performed in July 2006 also identified problems with WED's implementation of tracking and closure via CARS, which was documented and resolved under an Observation. Although the WED staff underwent a training session and closure packages were compiled at that time to address these problems, corrective actions were not long lasting, since these problems recurred during this assessment.

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Appendix A. Assessment Plan Appendix B. WED Oversight Assessment Checklist

LIST OF ACRONYMS

AFI Assessment Followup Item
ASX Autosampling System
BNI Bechtel National, Inc.

CARS Corrective Action Reporting System

DI desk instruction

DOE U.S. Department of Energy

HF (HF)

IDMS Integrated Data Management System

ORP Office of River Protection
WED WTP Engineering Division

WTP Waste Treatment and Immobilization Plant

1.0 INTRODUCTION

A major component of the U. S. Department of Energy (DOE), Office of River Protection (ORP) mission is the design and construction of the Waste Treatment and Immobilization Plant (WTP) Project in the 200 East Area of the Hanford Site. The WTP design and construction contractor is Bechtel National, Inc. (BNI). As part of its oversight responsibilities, ORP performs various assessments of BNI activities during the design and construction phase. One type of assessment is the design review of various systems and processes, called a design oversight, performed by the WTP Engineering Division (WED). The WED Design Oversight Program is defined in Desk Instruction (DI) 220.1, Conduct of Design Assessment, and is based on DOE O 226.1, Implementation of Department of Energy Oversight Policy, and ORP M 220.1, ORP Integrated Assessment Program.

As part of this design oversight, a consultant performed an independent management assessment to verify the WED Design Oversight Program complied with the implementing documents, ORP M 220.1, Rev. 4. and ORP DI 220.1, Rev. 1. In addition, the assessor reviewed the implementation of the WED oversight process of identifying, transmitting, tracking, and closing issues, both to the Contractor and internal to ORP, based on design oversight reports issued from August 25, 2006, to present. The assessor reviewed open followup items from WED assessments completed prior to August 25, 2006, to determine if responses were timely, and to compare actual status to that recorded on various status tracking documents.

2.0 BACKGROUND

The WED has primary responsibility for design oversight of the WTP and has been actively performing this oversight since April 2003. During that period, over 30 assessment plans have been executed, with reports issued and actions tracked to provide active oversight of the research and technology, process flow, design, configuration management, component viability, etc.; thus, ensuring the Contractor is properly designing, procuring, and installing the WTP facilities.

This independent assessment evaluates the results of design oversight performed since the last WED self-assessment in August 2006, and provides assurance that the issues identified in the oversight reports were properly transmitted to the Contractor for action and followed to resolution in a traceable and recoverable fashion. This oversight assesses the status and effectiveness of the WED design oversight process for this period.

3.0 OBJECTIVES, SCOPE, AND APPROACH

3.1 OBJECTIVES

ORP conducted this independent assessment as part of its responsibility for compliance to DOE O 226.1. The assessment was performed to satisfy the requirements of ORP M 220.1, Section 6.2.5, "Management Assessment Conduct," which requires direct reports to assess their management processes to their manager, and to identify and correct problems that hinder their organizations from achieving their objectives. The specific objectives of this assessment are listed in Appendix A and repeated below:

- 1. Review the compliance of ORP WED assessments to ORP M 220.1 and ORP DI 220.1 for all reports issued since the last self-assessment.
- 2. Review the oversight reports written since the last self assessment of the WED design oversight program to determine what issues were identified and verify they were transmitted to the Contractor.
- 3. Review the WED program for tracking of assessment issues and verify acceptability of Contractor corrective actions and the closure documentation of these corrective actions.
- 4. Review any assessment issues identified for ORP action were placed in CARS.

3.2 SCOPE

The scope of this assessment covered the period from August 2006 to present, and includes design oversight assessment reports D-06-DESIGN-023 (July 27, 2006) to the last issued report D-06-DESIGN-033 (December 6, 2006). In addition, followup items from assessments prior to August 2006 that were open at the time of this assessment were reviewed to determine if responses were timely, and to compare actual status to that recorded on various status tracking reports. Finally, WED personnel were interviewed to determine if their actions to plan, perform, track, and close oversight assessments complied with governing instructions and management expectations.

3.3 APPROACH

ORP conducted this assessment within the guidelines of ORP DI 220.1. ORP collected information from various BNI and DOE documents and conducted interviews with WED and Contractor staff (see Section 6.0 for a full listing of reviewed documents and persons contacted). The approved design oversight plan, "Self Assessment of Waste Engineering Division Design Oversight Program and Results," is provided in Appendix A.

The assessor initiated the following steps to obtain information required to meet the oversight objectives. The order of review and depth of each step was left to the reviewer's discretion.

- 1. The assessor reviewed the oversight process as described in ORP DI 220.1, Rev. 1, and compared it to the process actually being implemented by WED personnel, as well as to documented oversight plans and assessments. This was done to determine if assessments were being performed and documented in accordance with the governing instruction.
- 2. The assessor reviewed the design oversight reports issued since August 2006 to identify followup items within the reports, whether the transmittal letter requested responses by the Contractor to these items, and whether these items were entered into the ORP Corrective Action Reporting System (CARS). Closed CARS were reviewed to determine if they contained evidence of closure for followup items.
- 3. The assessor interviewed WED personnel and management to identify their understanding of the oversight process, as well as management's expectations for implementing it. In addition, interviews discussed the status of individual followup items and whether the documented status was consistent with the actual status.

Interviews also discussed the timeliness and adequacy of Contractor responses to oversight followup items.

- 4. The assessor reviewed various reports (both ORP and Contractor) that contain status of WED oversight assessments to determine whether they were accurate, consistent, and complete.
- 5. The assessor reviewed "closure packages" for oversight assessments to determine if a package was prepared for each assessment, and whether information in them was complete and consistent with CARS information and status reports.

4.0 RESULTS

The oversight results are broken into three areas:

- 1. Compliance of the Oversight Program with governing instructions
- 2. Status reporting and tracking of oversight assessments and followup items
- 3. Timeliness and adequacy of followup item closure.

4.1 COMPLIANCE OF THE OVERSIGHT PROGRAM WITH GOVERNING INSTRUCTIONS

Oversight assessments performed since August 2006 included plans constructed in accordance with the guidelines in ORP DI 220.1, with transmittal letters to the Contractor notifying them of the scope and schedule. Oversight reports were consistent with the outline in ORP DI 220.1, as well. Transmittal letters to the Contractor clearly identified whether or not there were followup items for Contractor action. However, the assessor identified one oversight report that was transmitted internal to ORP rather than to the Contractor. This was not in compliance with ORP DI 220.1 and constitutes a Finding, as follows:

(D-07-WED-037-F01) ORP DI 220.1, Rev. 1, Section 6.2.4.2, "Review of Draft Report," states, "The Team Lead will prepare a transmittal letter from the Manager, ORP, to BNI, as required and will enter the letter and design oversight report into concurrence routing." Section 6.2.4.3, "Report Transmittal," states, "The final report will be transmitted by letter to BNI from the PMWTP."

Contrary to the above, oversight assessment D-06-DESIGN-024, Review of the Technical Evaluation of the Simulator Process Model (Software) and the Simulator Facility, issued on March 8, 2006, was transmitted internally (06-WED-014) within ORP and not to the Contractor.

Followup items in oversight assessments were not always entered into CARS for tracking toward resolution. In addition, some CARS for followup items were closed without documentation that justified the basis for adequacy of closure. This was not in compliance with the ORP DI 220 and constituted a Finding as follows:

(**D-07-WED-037-F02**) ORP DI 220.1, Rev. 1, Section 6.2.5, "Closure," requires "issues resulting from the design oversight be tracked to resolution by ORP through CARS. The Team Lead with concurrence of the WED Director should confirm that these issues have been adequately resolved."

Contrary to the above, examples were identified in which CARS were closed with no evidence of sufficient actions taken to adequately resolve the documented issues. In addition, there is no evidence that the WED Director concurred with closure of these CARS.

- CARS 10266 (Recommendation #2 from Oversight Assessment D-04-DESIGN-005, Review of Contractor Process for Design of the Main Control Room, issued November 30, 2004)
- 2. CARS 11090 (eight Recommendations from Oversight Assessment D-04-DESIGN-008, *HLW Vitrification Plant*, issued January 3, 2005)
- 3. CARS 10267 (Recommendation #3 from Oversight Assessment D-04-DESIGN-007, *Hydrogen Mitigation and Control Systems*, issued November 22, 2004). In this case, the due date for addressing the recommendation was December 31, 2015, because the action to address the recommendation can only be taken during hot operations/hot commissioning. Due to the need for specific plant conditions, it is impossible to close this CAR at this time.
- 4. CARS 10269 (Recommendations 1 5 from Oversight Assessment D-05-DESIGN-010, Review of Contractor Process for Preparation of System Descriptions, issued June 13, 2005). In this case, CARS 11041 was also originated requiring ORP to locate correspondence which accepts BNI's responses to the assessment recommendations. This CARS was also closed without evidence of any actions taken to address it.

Contrary to the above, examples were identified where followup items from oversight assessments were not documented in CARS by ORP.

- Oversight Assessment D-04-DESIGN-005, Review of Contractor Process for Design of the Main Control Room, issued November 3, 2004, contained three Recommendations, only one of which (#2) was entered into CARS (10266). Recommendation #1 required action by the Contractor, while Recommendation #3 required action by ORP. Design Oversight Note D-05-DESIGN-026-JEO-01 (no date indicated) stated the first recommendation was closed by revising the (HF) Plan, but does not cite evidence that the Contractor revised the HF Plan to adequately resolve the Recommendation.
- 2. Oversight Assessment D-04-DESIGN-004, *Design for Pretreatment Facility Evaporators*, issued September 9, 2004, contained one Open Item, and four Recommendations for BNI, as well as two Recommendations for DOE/ORF. None of these followup items were entered into CARS.
- 3. Oversight Assessment D-05-DESIGN-018, Design of the Pretreatment of Radioactive Liquid Waste, issued February 10, 2006, did not contain formal, documented followup items of any kind, yet noted that some significant issues that remained unresolved at the time were documented in the Risk Management Database as risk management datasheet WTP-IMT-020, with issues anticipated to be closed by March 2010. This was not documented in CARS.

- 4. Oversight Assessment D-06-DESIGN-027, Radiochemical Analytical Laboratory Autosample Pneumatic Transfer System Design (ASX), issued September 25, 2006, contained three Assessment Followup Item (AFI), all involving actions to be taken when the design of the Autosampling System (ASX) attained maturity. These were not documented in CARS. (This was corrected during the assessment with issuance of CARS 11493, 11494, and 11495.)
- 5. Oversight Assessment D-06-DESIGN-033, Standards Flowdown for Round High Efficiency Particulate Air (HEPA) Filters, issued December 6, 2006, contained one AFI which was not documented in CARS.

Interviews with WED management revealed a number of expectations relative to planning, performing, documenting, and tracking the status of oversight assessments that are not contained in the desk instruction or any other instruction. In addition, management expectations for closing out AFIs are unclear to WED personnel, and are not entirely documented in applicable instructions (ORP DI 220.1, Rev. 1). For example:

- Persons interviewed were not consistent in their understanding of the use of CARS for documenting, tracking, and closing out AFIs.
- Persons interviewed were inconsistent in their knowledge of the types of followup items (concerns, findings, AFIs, observations, open items, and recommendations) to which the Contractor is expected to respond. For example, during the assessment, the WED Director at a weekly division meeting clarified his expectations for use of AFIs -- AFIs are not to be assigned to followup items requiring Contractor response. Some WED personnel believed this was not consistent with the definition of AFI in the ORP instructions.
- Persons interviewed were inconsistent with respect to the vehicles (internal ORP memorandum, letter to the Contractor, e-mail to ORP management and the Contractor, or future oversight assessment) through which AFIs can be evaluated and closed.
- Assessment "closure books," and other specific expectations related to closeout of assessments, are not documented in the desk instruction (ORP DI 220.1, Rev. 1).

The WED Division Director discussed with the assessor a list of actions relating to oversight assessments that he considered necessary to produce a viable deliverable. However, he had not communicated his expectations to division personnel. The WED Division Director suggested these be placed in a checklist in the desk instruction that WED personnel should follow when performing oversight assessments. The checklist is contained in Appendix B of this report. Since the actions in the proposed checklist are not aligned with the current desk instruction, the instruction is in need of revision to include them. This is being tracked under Observation D-07-WED-037-O04.

Assessment "closure books" for oversight assessments completed prior to August 2006 have been constructed and are being maintained by WED Lead Assessors. These books contain copies of assessment plans and reports, forwarding correspondence, and correspondence from the Contractor and ORP discussing responses to and acceptability of resolution to followup items. Although there is no written guidance that requires this be done, it is a division

management expectation. Management believes these are necessary for ease of retrieval of correspondence associated with assessments so that their status can be readily verified, particularly in light of the lack of confidence in the completeness and accuracy of followup item information in CARS. Once a "closure book" is complete, information in it is entered into Integrated Data Management System (IDMS). At the time of the last WED self-assessment, closure books for oversight assessments 001 through 022 were constructed and maintained current. Since then, oversight assessments 023 through 037 have been planned or completed. Of these, only three have closure books currently constructed. This was identified by CRP in an e-mail to assigned Lead Assessors dated January 22, 2007. As of the date of this assessment, construction of the remaining closure books is still pending.

The assessor reviewed qualification records to ensure personnel who performed as Tearn Leaders on oversight assessments were qualified to do so. Four WED personnel who led oversight assessments had not fully completed Team Lead qualification requirements. This represents a Finding as follows:

(D-07-WED-037-F03) ORP DI 220.1, Rev. 1 states in Section 6.2.1.2, "Selection and Qualification of Design Review Teams and Design Oversight Teams," that Design Oversight Team Members and Design Oversight Team Leaders shall qualify to Attachment 9.1. "... A Design Oversight Member or Team Lead will be considered fully qualified under this procedure by completing a Reviewer Qualification, successful participation in a minimum specified number of assessments, and completion of an interview with the WED Director, as documented in Attachment 9.1."

Contrary to the above, four WED personnel led oversight assessments without meeting all of the requirements for Team Lead qualification:

- D. Alexander led oversight assessments D-04-DESIGN-007 and D-04-DESIGN-008 without documentation that he had completed any of the Team Lead qualification requirements in Section II of Attachment 9.1 of the desk instruction.
- C. Babel led oversight assessment D-05-DESIGN-018 without documentation that she had completed any of the Team Lead qualification requirements in Section II of Attachment 9.1 of the desk instruction.
- M. Ryan led oversight assessment D-05-DESIGN-019, which was counted as one of the
 three assessments performed under a qualified senior team lead. With only two
 assessments in which she performed as a team member, she failed to meet the
 requirement to perform as a team member under three such assessments before being
 qualified as a team leader.
- J. Orchard led oversight assessments D-04-DESIGN-005 and D-05-DESIGN-010, which were counted as two of the three assessments performed under a qualified senior team lead. With only one assessment in which he performed as a team member, he failed to meet the requirement to perform as a team member under three such assessments before being qualified as a Team Leader.

CONCLUSION

Implementation of the WED Design Oversight Program was generally in compliance with the governing instructions, particularly relative to planning, performing, and transmitting assessment results to both ORP and the Contractor. However, one example was found in which a completed oversight assessment was not transmitted to the Contractor as required by the desk instruction, as documented in Finding D-07-WED-037-F01. In addition, program implementation was not in compliance with governing instructions relative to entry of followup items into CARS and closure of those items in CARS, as documented in Finding D-07-WED-037-F02. Furthermore, four WED personnel who led oversight assessments were not fully qualified to do so; this was documented in Finding D-07-WED-037-F03. Also, division management had performance expectations for oversight assessments that were not being generally met, including constructing and maintaining "closure books" current and complete. This is because many of these expectations had not been broadly communicated by management nor documented in the governing instructions. This, and the need to further revise the desk instruction for inclusion of the actions, is being tracked under Observation D-07-WED-037-O04.

4.2 STATUS REPORTING AND TRACKING OF OVERSIGHT ASSESSMENTS AND FOLLOWUP ITEMS

There are currently three databases/reports (two ORP, one Contractor) that contain status information on WED oversight assessments:

- 1. ORP Design Oversight Assessment Status report (non-mandatory report maintained by J. Adams in WED). WED resources are required to maintain and revise the data for this report; however, the report is not used by WED management to track status of assessments and followup items. It is not reviewed and maintained current at a specific periodicity.
- 2. ORP Consolidated Action Reporting System (procedurally required ORP CARS WED report). The WTP Engineering Division (WED) printout is used by WED management to discuss "major work" on a weekly basis, while the WTP Open Assessment Findings and Followup Items printout is used to discuss actions being taken to resolve AFIs on an every-other-week basis. This report is updated by an individual who attends the division meetings and takes notes about changes in assessment and followup item status. Discussions with WED Team Leads indicated that the majority are not self-motivated to assure accurate status is maintained in this report, or to take action to timely close followup items in CARS.
- 3. BNI Design Oversight Open Items Status report (non-mandatory report maintained by Contractor QA). This report is used internally by the BNI Quality Assurance Point-of-Contact to track BNI line and functional organization responses to oversight AFIs. It is neither used by Contractor nor ORP management. It is the Contractor's prerogative to use and maintain this database/report as they see fit.

Only item 2, above, is required by procedure, revised on a weekly (periodic) basis, and reviewed by division management. The other two non-mandatory reports are revised and updated on an ad hoc basis by their administrators and used informally to track status and pending actions.

The assessor found these reports contained inaccuracies and inconsistencies.

1. ORP CARS WED report (dated January 16, 2007) used by the WED Division

Director for tracking assigned work within the division does not have assessment milestones for assessment D-06-DESIGN-036, even though the plan has been approved and the assessment has begun.

- 2. BNI Design Oversight Open Item Status report (dated January 4, 2007) contains status that is inconsistent with the ORP Design Oversight Assessment Status report:
 - D-06-DESIGN-025 status is "assessment ongoing" in BNI's report, while the ORP Design Oversight Assessment Status report status is "cancelled."
 - D-04-DESIGN-004 status is "ORP receipt and acceptance of actions" in BNI's report, while the ORP Design Oversight Assessment Status report status is "analysis working."
 - D-06-DESIGN-027 status is "report in DOE review cycle" in BNI's report, while
 the ORP Design Oversight Assessment Status report status is "response overdue."
 The report was transmitted to BNI on September 25, 2006, by ORP letter
 06-WTP-105; it contained three AFIs requiring only ORP action. Neither status
 appears correct.
- 3. The ORP Design Oversight Assessment Status report contains incorrect status information in some cases:
 - For assessment D-03-DESIGN-002, the status is "CARS 9333, 9326, 10337, 10338, and 10002 still open." The CARS database shows 10337 and 10338 cancelled/closed, 10002 open but involving assessment 021, and 9333 open but involving assessment 031.
 - For assessment D-03-DESIGN-004, the status is "CARS 10080 closed based on letter 06-WTP-059." Although the CARS is closed, one of the AFIs involved resolution that requires adding information to the Maintenance and Operations (M&O) contract, which will not be let for some time. Without an "open item" in CARS for this pending action, it may never occur.
 - For assessment D-03-DESIGN-005, the status is "CARS 9140-9149 inclusive still open." A check of these items in the CARS database indicates that CARS with these numbers do not exist (or were closed and removed from the database).
 - For assessment D-05-DESIGN-016, the status is "CARS 9678 closed ready for IDMS." The correct reference should be CARS 9453.
 - For assessment D-06-DESIGN-030, the status is "response due in 30 days." The transmittal letter for the assessment states no response from the Contractor is required (four AFIs were cited as requiring future action by ORP).

CONCLUSION

WED oversight assessments and followup items are required to be entered and tracked in CARS. The CARS database is used to generate reports that are reviewed by division management with status updates at regular intervals. This mandates information in the CARS database be accurate and current – the person with vested interest in assuring this should be the assigned Lead Assessor. However, weakness in ownership of WED assessments by assigned WED Leads

contributes to problems with the database. This is being tracked under Observation D-07-WED-037-O04.

4.3 TIMELINESS AND ADEQUACY OF FOLLOWUP ITEM CLOSURE

In order to evaluate the acceptability of Contractor actions to AFIs, such items would need to have been evaluated and accepted by ORP Lead Assessors. This is because this assessment is evaluating WED performance, not the Contractor's. None of the oversight assessments within the scope of this self assessment (issued since August 2006) had followup items responded to by the Contractor and evaluated for acceptance by the WED Lead Assessor. Consequently, this assessment draws no conclusion about the acceptability of Contractor corrective actions to AFIs.

In some cases, ORP is not facilitating timely closure of AFIs:

- Assessment D-06-DESIGN-023, HPAV Design Oversight, issued August 25, 2006, had 11 Open Items to which BNI responded on October 13, 2006 via letter CCN 145108.
 To date, the Lead Assessor has not evaluated and documented the acceptability of BNI's response.
- Assessment D-06-DESIGN-029, Contractor Configuration Management of As-Built Systems, issued October 12, 2006, had five followup items (two Findings, two AFIs, and one Observation) to which BNI responded on November 22, 2006, via letter CCN 146709. Although the Lead Assessor evaluated and documented the acceptability of BNI's response in a draft letter to BNI, management review in the concurrence chain took several weeks and resulted in a decision to handle item closure in a different manner. Actions to close the items are still pending at the time of this assessment.

Periodic meetings in which WED Division work and Open Assessment Findings and Followup Items are reviewed do not focus accountability on accurate and timely closure of AFIs. Every other Wednesday, the WED Manager meets with his division to review the status of "major work" (on the ORP CARS WED report), which includes assigned oversight assessments. Near the end of these meetings, AFI status is discussed (based on the WTP Open Assessment Findings and Followup Items report). Minimal time and emphasis is placed on the latter session in most meetings, which sends the message to WED staff that these followup items are not important. This explains, in part, Finding D-07-WED-037-F02 and some of the other performance insights. If oversight assessments are important enough for management to monitor as "major work," the status of actions to close followup items from these assessments should be equally important.

CONCLUSION

Lead assessors are not always timely in evaluating and documenting the adequacy of Contractor responses to followup items in their oversight assessments. In addition, division management does not emphasize to the Leads the importance of timely review of outstanding actions from oversight assessments. This is being tracked under Observation D-07-WED-037-O04.

5.0 OPEN ITEMS

FINDINGS

D-07-WED-037-F01 ORP DI 220.1, Rev. 1, Section 6.2.4.2, "Review of Draft Report," states, "The Team Lead will prepare a transmittal letter from the Manager, ORP, to BNI, as required and will enter the letter and design oversight report into concurrence routing." Section 6.2.4.3, "Report Transmittal," states, "The final report will be transmitted by letter to BNI from the PMWTP."

Contrary to the above, oversight assessment D-06-DESIGN-024, Review of the Technical Evaluation of the Simulator Process Model (Software) and the Simulator Facility, issued on March 8, 2006, was transmitted internally (06-WED-014) within ORP and not to the Contractor.

D-07-WED-037-F02 ORP DI 220.1, Rev. 1, Section 6.2.5, "Closure," requires "issues resulting from the design oversight be tracked to resolution by ORP through CARS. The Team Lead with concurrence of the WED Director should confirm that these issues have been adequately resolved."

Contrary to the above, examples were identified in which CARS were closed with no evidence of actions taken sufficient to adequately resolve the documented issues. In addition, there is no evidence that the WED Director concurred with closure of these CARS.

Contrary to the above, examples were identified where followup items from Oversight Assessments were not documented in CARS by ORP.

D-07-WED-037-F03 ORP DI 220.1, Rev. 1 states in Section 6.2.1.2, "Selection and Qualification of Design Review Teams and Design Oversight Teams," that Design Oversight Team Members and Design Oversight Team Leaders shall qualify to Attachment 9.1. "... A Design Oversight Member or Team Lead will be considered fully qualified under this procedure by completing a Reviewer Qualification, successful participation in a minimum specified number of assessments, and completion of an interview with the WED Director, as documented in Attachment 9.1."

Contrary to the above, four WED personnel led oversight assessments without meeting all of the requirements for Team Lead qualification.

OBSERVATIONS

D-07-WED-037-O04 Observation D-07-WED-037-O01 documented problems that contribute to poor performance in each of the three areas assessed. These included:

- 1. Division management had performance expectations for oversight assessments that were not being generally met, including constructing and maintaining "closure books" current and complete.
- 2. The desk instruction needs revision to include actions that cover various management expectations not documented therein.
- 3. Weakness in ownership of WED assessments by assigned WED Leads contributes to problems with the CARS database.
- 4. Lead assessors are not always timely in evaluating and documenting the adεquacy of Contractor responses to followup items in their oversight assessments. In addition, division management does not emphasize to the Leads the importance of timely

review of outstanding actions from oversight assessments.

6.0 REFERENCES AND PERSONNEL CONTACTED

6.1 REFERENCES

ORP M 220.1, Integrated Assessment Program, Revision 4.

ORP Desk Instruction DI 220.1, Conduct of Design Assessment, Revision 1.

9 WED oversight assessment reports with transmittal letters (since August 2006).

15 WED oversight assessment reports with open followup items (prior to August 2006).

ORP Consolidated Action Reporting System WTP Engineering Division (ORP CARS WED) report, dated January 16, 2007.

BNI Design Oversight Open Items Status report, dated January 14, 2007.

CARS WTP Open Assessment Findings and Followup Items report, dated January 25, 2007.

ORP Design Oversight Assessment Status report undated (maintained by J. Adams in WED).

"Closure Books" for several WED oversight assessments.

Design Oversight Qualification Records for WED personnel who led oversight assessments (most records signed in mid 2006).

6.2 PERSONNEL

- J. Adams
- C. Babel
- R. Griffith
- D. Kammezind
- L. Miller
- J. Orchard
- M. Ryan
- C. Ungerecht

Appendix A. Assessment Plan

Appendix B. WED Oversight Assessment Checklist

The following is a list of activities/deliverables that WED personnel should take or produce to ensure that management expectations for oversight assessments are met:

Number	Description	Checkoff
1	Obtained Division Director approval for schedule changes well in advance of the original schedule date (if applicable).	
2	Submitted Assessment Plan for Division Director approval at least 3 weeks prior to start of assessment.	
3	Transmitted approved Assessment Plan via formal letter to Contractor at least 2 weeks prior to start of assessment.	
4	Debriefed ORP Division Director at end of assessment on followup items and their characterization (concern, finding, etc.), and prior to final debrief of Contractor.	
5	Discussed assessment results as part of McCormick-Barger's quarterly exit meeting.	
6	Submitted draft assessment report to Division Director no later than 20 working days after Contractor debrief, with final report submitted no later than 30 working days after Contractor debrief.	
7	CARS assigned to followup items and documented in assessment report when report is approved.	
8	Transmittal letter to Contractor described whether a response was required (concerns and findings require a Contractor response, whereas AFIs and Observations typically do not).	
9	Constructed "closure book" and populated it with applicable documents.	
10	Acceptable Contractor responses that contain actions with future completion dates loaded into CARS. Unacceptable Contractor responses to AFIs discussed in transmittal letter to Contractor.	
11	Prior to closing out CARS, obtained concurrence of Division Director for followup items where Contractor actions acceptably resolved them (closure can be documented in letter to Contractor, e-mail, internal ORP memo, or followup oversight assessment).	
12	Reviewed "closure book" to ensure complete and submitted to IDMS for inclusion in ORP/WED document records.	

Task# ORP-WTP-2007-0044

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Subject	(Concur 07-WTP-040) TRANSMITTAL OF WTP ENGINEERING DIVISION (WED) INDEPENDENT ASSESSMENT DESIGN OVERSIGHT REPORT - MANAGEMENT SELF ASSESSMENT OF BECHTEL NATIONAL, INC. (BNI) OVERSIGHT PROGRAM AND REVIEW OF BNI EFFECTIVENESS FOR ENGINEERING ACTIONS D-07-DESIGN-037		
Parent Task#		Status	CLOSED
Reference		Due	
Originator	Licht, Sarah	Priority	High
Originator Phone	(509) 376-9025	Category	None .
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Remote Task#		Generic2	
Deliverable	None	Generic3	
Class	None	View Permissions	Normal
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Originator	Licht, Sarah	Priority	High
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