

U.S. Department of Energy

Office of River Protection

P.O. Box 450, MSIN H6-60 Richland, Washington 99352 OCT 1 0 2006

06-WTP-142

Mr. C. M. Albert, Project Manager Bechtel National, Inc. 2435 Stevens Center Place Richland, Washington 99354

Dear Mr. Albert:

CONTRACT NO. DE-AC27-01RV14136 -- INSPECTION REPORT A-06-AMWTP-RPPWTP-003 -- ON-LOCATION INSPECTION REPORT FOR THE PERIOD JULY 1, 2006, THROUGH SEPTEMBER 30, 2006

This letter forwards the results of the U.S. Department of Energy, Office of River Protection review of Bechtel National, Inc. (BNI) construction performance of the Waste Treatment and Immobilization Plant for the period July 1, 2006, through September 30, 2006. Four Findings were identified requiring a formal response. These Findings regard: 1) failure to fully implement the corrective action program for lock out/tag out issues; 2) failure to ensure Low-Activity Waste Gloveboxes were procured with electrical wiring compliant to National Electrical Code requirements; 3) failure to adequately prepare structural steel skewed-T weld joints in accordance with American Welding Society (AWS) D.1.1 weld preparation requirements; and 4) failure to ensure weld procedures and welder qualifications comply with American Society of Mechanical Engineering B31.3 and or AWS D1.1 requirements. The Notice of Finding (Attachment 1) describes these issues and contains the instructions for responding.

During a review of BNI's Weld Program substantial improvements in the Weld Control Manual were identified. Notwithstanding this, the skewed-T weld joint preparation and weld under sizing (BNI identified) issues may have a significant impact on construction and should be carefully reviewed. Please provide in your response to Finding A-06-AMWTP-RPPWTP-003-F06 the extent of condition (if these types of weld deficiencies [preparation and sizing issues] apply to BNI, subcontractor, and supplier welds) and BNI actions to ensure current and future welds of this type fully comply with design and code requirements.

This letter is not considered to constitute a change to the Contract. In the event BNI disagrees with this interpretation, it must immediately notify the Contracting Officer orally, and otherwise comply with the requirements of the Contract clause entitled 52.243-7 Notification of Changes.

Mr. C. M. Albert 06-WTP-142

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If you have any questions, please contact me, (509) 376-3681.

Sincerely,

John R. Eschenberg, Project Manager

Waste Treatment and Immobilization Plant Project

OCT:JWM

Attachments:

- 1. Notice of Finding
- 2. On-Location Inspection Report

cc w/attach:

- D. Kammenzind, BNI
- G. Shell, BNI

BNI Correspondence

NOTICE OF FINDING

Section C, "Statement of Work." Standard 7, "Environment, Safety, Quality, and Health," of Contract DE-AC27-01RV14136, dated December 11, 2000, between the U.S. Department of Energy (DOE) and Bechtel National, Inc. (BNI), defined BNI's responsibilities under the Contract as they are related to conventional non-radiological worker safety and health; radiological, nuclear, and process safety; environmental protection; and quality assurance.

Standard 7, Section (e)(3) of the Contract required BNI to develop and implement a Quality Assurance (QA) program, supported by the documentation that describes the overall implementation of QA requirements. The documentation shall identify the procedures, instructions, and manuals used to implement BNI's QA program within BNI's scope of work. For radiological, nuclear, and process safety, QA is to be conducted in accordance with 10 CFR Part 830.120. BNI's QA program was documented in 24590-WTP-QAM-QA-01-001, "Quality Assurance Manual (QAM)," dated August 1, 2005.

QAM Policy Q-05.1, Section 3.1.1 stated activities affecting quality shall be prescribed by and performed in accordance with documented instructions, procedures, and drawings. Furthermore, Section 3.4 stated "All individuals at the project shall comply with the implementing documents."

QAM Policy 07.1, *Control of Purchased Items and Services*, section 3.7.1 stated "The purchase of items and services shall establish measures to interface with the suppliers and to verify supplier's performance."

BNI Contract Section C.7(f) required BNI to comply with the National Electric Code (NEC) and the Uniform Building Code (UFC).

Section C, Standard 7(d) required BNI to develop and implant an integrated, standards-based, safety management program to ensure radiological, nuclear, and process safety requirements are defined, implemented, and maintained. BNI is required to conduct work in accordance with a BNI-developed and DOE-approved Safety Requirements Document (SRD).

During performance of assessments of BNI's construction activities, conducted from July 1, 2006, through September 30, 2006, DOE Office of River Protection (ORP) identified the following Findings:

- 1) Three examples of a Finding for failure to follow procedures, required by QAM Policy Q-05.1 Section 3.1.1 and 3.4, was identified as follows:
 - a. BNI procedure 24590-WTP-GPP-QA-201, *Corrective Action*, Section 3.3.2 stated "Upon identification of an adverse condition, the Originator shall: Initiate a CAR, documenting the condition in detail, including applicable references...."

Contrary to the above, during a review of electrical equipment for proper tagging and labeling, BNI identified a number of errors in this area and with assured grounding testing but did not enter these issues into the CAR system.

This is considered a Finding against the requirements of QAM Policy Q-05.1 (Finding **A-06-AMWTP-RPPWTP-003-F03a**). (Inspection Note 003-07)

b. BNI procedure 24590-WTP-GPP-QA-201, *Corrective Action*, Section 3.5.4.1 Stated the Responsible Manager/Actionee will, "Implement the approved corrective actions," and Section 3.5.4.1 Stated "For Level 1 CARs: After corrective action has been completed ...submit completion information to notify the Responsible Manager that corrective action is complete."

Contrary to the above, CAR-QA-06-062 required procedure clarification/training and was closed without documenting the procedure clarification/training was completed.

This is considered a Finding against the requirements of QAM Policy Q-05.1 (Finding **A-06-AMWTP-RPPWTP-003-F03b**). (Inspection Note 003-07)

c. BNI procedure 24590-WTP-GPP-QA-201, *Corrective Action*, Section 3.4.3.1 stated in a note, "Significant, external, and High-Level Waste (HLW) affecting CARs will never be identified as Level 1.

Contrary to the above, CAR-QA-06-062 was screened as being both significant and external but was classified as a Level 1 CAR.

This is considered a Finding against the requirements of QAM Policy Q-05.1 (Finding **A-06-AMWTP-RPPWTP-003-F03c**). (Inspection Note 003-07)

2) NEC requires size #12 AWG wiring for the LAW Govebox lighting and requires the electrical plug fixture to be located directly above the light fixture.

Contrary to the above, procured LAW Gloveboxes contained lighting with wiring for lighting that was #14 AWG when #12 AWG was required by both BNI specification and NEC code. Also, the electrical plug fixture was not located directly above the light fixture.

This is considered a Finding against the Contract requirement to follow the NEC requirements (BNI Contract Section C.7(f)) (**A-06-AMWTP-RPPWTP-003-F04**). (Inspection Note 003-33)

3) AWS D1.1 (required by the UBC) Paragraph 3.9.3.1 provides weld preparation requirements when using prequalified welding procedures.

Contrary to the above, LAW pipe support 24590-LAW-PCW-H00041 was installed without preparing the welds in accordance with Paragraph 3.9.3.1 of AWS D1.1.

This is considered a Finding against the Contract requirement to follow the UBC requirements (BNI Contract Section C7(f)) (**A-06-AMWTP-RPPWTP-003-F06**). (Inspection Note 003-28)

- 4) SRD Safety Criterion 4.2-2 requires BNI to install piping in accordance with ASME B31.3-96. Section C.7(f) of the Contract requires BNI to implement the requirements of AWS D1.1. Three examples of a Finding were identified for failure to have a Weld Control Manual fully compliant with the requirements of ASME B31.3-96 and/or AWS D1.1 as follows:
 - a. ASME B31.3-96 requires weld procedure specifications (WPS) and associated procedure qualification records (PQR) to be developed in accordance with ASME Section IX. ASME Section IX, QW-256, Paragraph QW-404.14 requires WPS to specify essential variables.

Contrary to the above, WPS P45,P8-T-o and WPS P45,P43-T-o note 6 allowed autogenous tack welds when the associated PQR did not specify autogenous tack welds, an essential variable.

This is considered a Finding against the Contract requirement to follow the SRD requirements (BNI Contract Section C, Standard 7(d)) (**A-06-AMWTP-RPPWTP-003-F09a**). (Inspection Note 003-63)

b. WPS P1-A-LH, a prequalified procedure where no PQR was necessary, did not give any diameter limitations, a required non-essential variable in AWS D1.1 (required in Section C.7(f) of the Contract).

This is considered a Finding against the Contract requirement to follow the requirements of BNI Contract Section C.7(f) (**A-06-AMWTP-RPPWTP-003-F09b**). (Inspection Note 003-63)

c. ASME B31.3 Paragraph QW-322.2 requires welders with revoked qualifications to requalify.

Contrary to the above, welder P-085 was not requalified in accordance with QW-322.2 requirements.

This is considered a Finding against the Contract requirement to follow the SRD requirements (BNI Contract Section C, Standard 7(d)) (**A-06-AMWTP-RPPWTP-003-F09c**). (Inspection Note 003-63)

The Waste Treatment and Immobilization Plant Project Manager requests BNI to provide, within 30 days of the date of the cover letter that transmitted this Notice, a reply to the Findings above. The reply should include: (1) admission or denial of the Findings; (2) the reason for the Findings, if admitted, and if denied, the reason why; (3) the corrective steps that have been taken and the results achieved; (4) the corrective steps that will be taken to avoid further Findings; and (5) the date when full compliance with the applicable commitments in your authorization bases will be achieved. Where good cause is shown, consideration will be given to extending the requested response time.

U.S. DEPARTMENT OF ENERGY Office of River Protection

INSPECTION: On-location Inspection Report for the Period July 1, 2006, through

September 30, 2006

REPORT NO.: A-06-AMWTP-RPPWTP-003

FACILITY: Bechtel National, Inc. (BNI)

LOCATION: 2435 Stevens Center

Richland, Washington 99352

DATES: July 1, 2006, through September 30, 2006

INSPECTORS: J. McCormick-Barger, Construction Inspection Lead

J. Bruggeman, ORP Facility RepresentativeB. Harkins, ORP Facility RepresentativeJ. Christ, ORP Facility RepresentativeJ. Navarro, ORP Facility Representative

M. Evarts, Team Member D. Wallace, Team Member R. Taylor, Team Member

APPROVED BY: M. Thomas, Operations and Commissioning Team Leader

Waste Treatment and Immobilization Plant Project

INSPECTION REPORT

Introduction

During the period July 1 through September 30, 2006, the U.S. Department of Energy (DOE), Office of River Protection (ORP), Waste Treatment and Immobilization Plant (WTP) Project conducted inspections of important-to-safety (ITS) and non-ITS (Balance-of-Plant) activities of the construction of the WTP. These inspections were documented on inspection notes and maintained electronically. There were 65 inspections of various construction activities summarized below. A summary listing of the inspection notes is included in back of this report. Copies of the inspection notes are available upon request.

Significant Observations and Conclusion

- BNI installed forms, reinforcement, and embed steel (FRE), and/or batched, placed, consolidated, tested, and monitored concrete in accordance with engineering specifications and the Safety Requirements Document (SRD). (Inspection Notes 003-01, 003-13, 003-16, 003-19, 003-23, 003-29, 003-40, and 003-41)
- Pneumatic and hydraulic shop and field testing of installed (or to be installed) piping was conducted in accordance with site procedures and specifications, and code requirements. Piping was installed in accordance with design and specification requirements. (Inspection Notes 003-02, 003-03, 003-26, 003-31, 003-39, 003-46 and 003-58)
- Most electrical inspections identified acceptable work; however, some temporary and permanent electrical installation errors were identified. Examples included: (Inspection Notes 003-04, 003-05, 003-10, 003-11, 003-21, 003-24, 003-52, and 003-62)
 - (1) An equipment grounding conductor was not bonded to the wireway enclosure. This National Electrical Code (NEC) non-compliance is identified for trending as Assessment Follow-up Item (AFI) **A-06-AMWRP-RPPWTP-003-A01**. This item is opened and closed in this report. (Inspection Note 003-05)
 - (2) Cooling Tower Buildings 83 and 83S electrical drawings prescribed grounding wire color coding that was not within the site electrical standards grounding notes. BNI agreed to fix these drawing to reflect the standards. This minor issue will be tracked as AFI **A-06-AMWTP-RPPWTP-003-A07**. (Inspection Note 003-52)
 - (3) BNI had connected power distribution rack PDR-025, relocated south of High-Level Waste (HLW) to supply temporary power for Intermech Connexes, to the existing grounding electrode approximately 50' away from the grounding electrode conductor at distribution rack PDR-025. Correcting this minor temporary power electrical NEC violation will be tracked as assessment follow-up item **A-06-AMWTP-RPPWTP-003-A11.** (Inspection Note 003-62)

- An Emergency Drill at the Analytical Laboratory Facility construction site was well conducted and critiqued. (Inspection Note 003-06)
- During a review of a Lockout/Tagout (LOTO) tagging error (February 16, 2006, tagging error associated with at Pre-Treatment Facility disconnect switch) three examples of a Finding was identified as follows: (Inspection Note 003-07)
 - 1) During BNI's review of the event, other LOTO tagging errors were discovered but not entered into BNI's Corrective Actions System. This was a violation of the Corrective Action Procedure and a Finding against Quality Assurance Manual (QAM) Policy Q-05.1, *Instructions, Procedures, and Drawings* (A-06-AMWTP-RPPWTP-003-F03a).
 - 2) CAR-QA-06-062, associated with the LOTO error, was closed before all the corrective actions discussed in the CAR were closed. This was a second example of a violation of the Corrective Action Procedure and a Finding against QAM Policy Q-05.1, *Instructions, Procedures, and Drawings* (A-06-AMWTP-RPPWTP-003-F03b).
 - 3) CAR QA-06-062 was processed as a Level 1 CAR even though it was screened as both significant and an external CAR. This was a third example of a violation of the Corrective Action Procedure and Finding against QAM Policy Q-05.1, *Instructions, Procedures, and Drawings* (A-06-AMWTP-RPPWTP-003-F03c).
- From a review of BNI's event investigation program and a large number of the event investigations, BNI's event investigation process was found to have met the requirements of DOE M 231.1-2, *Occurrence Reporting and Processing of Operations Information*, and was being well implemented. (Inspection Note 003-08)
- Only a few instances of reports with inadequate date entry were identified with BNI's year 2005 Significance Category (SC) 3 and 4 Occurrence Reports. All future SC 3 and 4 Occurrence Reports must be reviewed by the Facility Representative. (Inspection Note 003-09)
- During this inspection period a number of welding inspections were performed as part of DOE's owner inspector oversight responsibilities. Weld cards were reviewed and selected weld cards were annotated with a DOE witness points. DOE inspectors were notified when the welds were ready for inspection. These inspections, as applicable, consisted of verifying fit-up or final weld and material configuration, pre-heat, spool orientation, materials including base metals and welding filler material, welder qualifications, inspector qualifications, weld documentation, and non-destructive examination results. During this period, BNI was performing welding operations within the Weld Control Manual and applicable welding codes. (Inspection Note 003-12, 003-15, 003-27, 003-30, 003-44, and 003-57)

- BNI's construction staff training program was found to be adequate and properly implemented. (Inspection Note 003-14)
- Although BNI's High Voltage work activities were performed in an acceptable manner, several concerns were noted with BNI's program for performing this type of work. These concerns included questioning the adequacy of the engineers', work planners' and electricians' training for this type of work, work package instructions and equipment used to perform zero energy tests, and work package instructions and equipment available to implement temporary grounding. Based on these issues, BNI planned to hire a high voltage expert to perform a review of BNI's high voltage training, procedures, and hardware. This effort will be tracked as AFI A-06-AMETP-RPPWTP-003-A05. (Inspection Note 003-17)
- With the exception of the high voltage issue describe above, BNI's electrical safety program was being implemented in an acceptable manner. (Inspection Note 003-18)
- The BNI Quality Control program was adequately implemented with properly specified requirements and qualified inspectors. (Inspection Note 003-20)
- BNI was adequately implementing the Occupational Heath and Safety requirement to protect workers from falling objects. (Inspection Note 003-22)
- The HVAC sub-contactor performed the rigging and placement of the 48" LAW Vent Stack into the main stack structural steel framework provided by BNI without incident. (Inspection Note 003-25)
- During a general welding surveillance of a LAW pipe support, the weld was found undersized and the weld preparation was not in accordance with AWS D.1.1 (skewed T-joint weld). Failure to properly prepare the welds in accordance with AWS D.1.1, when using a prequalified welding procedure is considered a Finding (A-06-AMWTP-RPPWTP-003-F06). (Inspection Note 003-28)
- BNI was adequately implementing its respiratory protection program. One area which could be improved was for BNI safety to periodically conduct more in-depth assessments to evaluate program effectiveness. (Inspection Note 003-32)
- Two electrical deficiencies were identified with lighting associated with procured LAW Gloveboxes. Wiring did not comply with engineering and NEC code requirements (undersized) and the electrical fixture was not directly above the outlet box as required by the NEC. The Material Acceptance Plan (MAP) did not specify electrical inspections. For future procurements, the MAP issue should be addressed as specified in the corrective actions from a previous inspection Finding; however, past procurements with electrical equipment should be assessed for compliance to NEC requirements. Failure to ensure electrical equipment complies with NEC requirements is considered a Finding (A-06-AMWTP-RPPWTP-003-F04). (Inspection Note 003-33)

- Cementitious fireproofing was being applied to LAW structural steel by a sub-contractor in accordance with manufacture's requirements. (Inspection Note 003-34)
- High density polyethylene (HDPE) shrink sleeve installations were being performed to approved engineering specifications and procedures in an acceptable manner. (Inspection Note 003-35)
- Safety related LAW siding was being installed by trained staff in accordance with the sub-contractor's Quality Assurance Manual. (Inspection Note 003-36)
- Work planning for a Lock Out/Tag Out (LOTO) for replacement of a rebar bending table foot switch and forward/reversing switch did not contain adequate instructions to control the hazardous energy. The shortcomings were identified by BNI staff during a pretest prior to applying the LOTO. BNI planned to take actions to improve the work planning process. (Inspection Note 003-37)
- A take cover emergency drill was well conducted and critiqued at the construction site. (Inspection Note 003-38)
- Work Package control was adequately implemented at the construction site. (Inspection Note 003-42)
- LAW ductwork (vent stack) testing verified the workmanship of the ductwork and conformed to contract documents and applicable codes. (Inspection Note 003-43, 003-51, and 003-56)
- Fit up and welding of the LAW Export Building door frame was performed in accordance with BNI's weld program and design requirements. (Inspection Note 003-45)
- Construction materials were being controlled, stored, and surveyed in accordance with BNI's material storage program. (Inspection Note 003-47)
- During installation of a temporary power 480 volt, 60 amp disconnect for High Mast Light HM-3, incorrect overcurrent protection was installed (30 amp fuse when 25 amp fuse required). This was contrary to the Contract requirement to comply with the NEC and was considered a Finding. Because this issue was addressed during the inspection cycle and had only minor safety significance, this issue will be assigned an assessment follow-up item for trending purposes and both opened and closed in this inspection note (A-06-AMWTP-RPPWTP-003-A02.). (Inspection Note 003-48)
- BNI's supplier oversight of the LAW and HLW melter fabricator was acceptable. The fabricator's quality and welding programs were also acceptable, meeting purchase order and BNI Contract requirements. (Inspection Note 003-49)

- BNI's oversight of a Utah pipe spool fabricator was also acceptable. The non-quality supplier also had an acceptable weld program and quality program for the level of work required of them. (Inspection Note 003-50)
- After a long initial delay, BNI successfully arranged for the supplier to start the diesel driven fire service water pumps. (Inspection Note 003-53)
- BNI's lessons learned procedures were adequate. The intranet database was an effective tool to disseminate lessons learned. However, weaknesses regarding not having an adequate balance in seeking more lessons learned from all construction project personnel; not having a good system for using lessons learned during work planning; and not having a metrics to measure the effectiveness of the lessons learned program, raised during an earlier lessons learned program review were not address. Follow-up to ensure these previously identified concerns are addressed will be tracked as open item A-06-AMWTP-RPPWTP-003-A08. (Inspection Note 003-55)
- BNI had adequately prepared for and removed the LAW Tower Crane jib sections in a safe manner in accordance with the applicable requirements. (inspection Note 003-54)
- BNI had implemented adequate changes to address the issue of workplace culture increasing the likelihood of certain types of occurrences as discussed in a Human Performance Improvement Assessment issued in January 2006. (Inspection Note 003-60)
- Following BNI's efforts to address weld program weaknesses, including reviewing and substantially revising the Weld Control Manual (WCM), DOE performed a Weld Program Assessment. This assessment included reviewing the WCM against applicable code requirements, reviewing weld procedure specifications (WPS'), reviewing procedure qualification records (PQRs), reviewing welder and weld inspector qualifications, observing welding in progress and weld rod control, and reviewing non-destructive examination (NDE) results for completed welds. The BNI weld program was found to have improved and was acceptable. Three examples of a Finding was identified regarding PQRs and a WPS not adequately specifying essential and non-essential variables, and a welder not being qualified in accordance with the WCM requirements (A-06-AMWTP-RPPWTP-003-F09a, b, &c). These examples were not considered significant. (Inspection Note 003-63)
- With minor exceptions, the barriers and controls implemented through FD Thomas'(FDT's) "Job Hazard Analysis" were effective for the painting and blasting tasks observed. BNI and FDT agreed to address the following concerns, 1) BNI would review and approval FDT's updated Job Hazard Analysis, 2) FDT would complete the installation of a respirator cleaning station, and 3) FDT would complete an evaluation of their Respirator Protection Program. Follow-up to ensure these concerns are addressed will be tracked as A-06-AMWTP-RPPWTP-003-0A10.
- The Government property protection program at the WTP Construction Site was adequate and functional. (Inspection Note 003-65)

List of Assessment Items Opened, Closed, and Discussed:

<u>Opened</u>

A-06-AMWTP-RPPWTP-003-A01	Assessment Follow-up Item	Electrical NEC grounding/bonding Finding entered as an AFI for tracking and tending. (Inspection Note 003-05)
A-06-AMWTP-RPPWTP-003-A02	Assessment Follow-up Item	Electrical NEC fuse rating (High Mast lighting Finding entered as an AFI for tracking and tending. (Inspection Note 003-48)
A-06-AMWTP-RPPWTP-003-F03	Finding	Follow-up on Contractor actions to address three examples (a, b, & c) of a Finding for not following BNI's <i>Corrective Action</i> procedure regarding LOTO violations. (Inspection Note 003-07)
A-06-AMWTP-RPPWTP-003-F04	Finding	Follow-up on Contractor actions to address a failure to ensure procured LAW Glovebox electrical equipment meets NEC and specification requirements. (Inspection Note 003-33)
A-06-AMWTP-RPPWTP-003-A05	Assessment Follow-up Item	Follow-up on BNI's actions to assess High Voltage related work training, procedures, and hardware. (Inspection Note 003-17)
A-06-AMWTP-RPPWTP-003-F06	Finding	Follow-up on Contractor actions to address LAW pipe support weld that was found undersized and the weld preparation was not in accordance with AWS D.1.1 (skewed T-joint weld). (Inspection Note 003-28)
A-06-AMWTP-RPPWTP-003-A07	Assessment Follow-up Item	Follow-up on BNI's actions to address Cooling Tower Building wire color coding issues. (Inspection Note 003-52)
A-06-AMWTP-RPPWTP-003-A08	Assessment Follow-up Item	Follow-up on BNI's actions to address weaknesses with the BNI Lessons Learned program. (Inspection Note 003-55)
A-06-AMWTP-RPPWTP-003-F09	Finding	Follow-up on Contractor actions to address

		issues (a, b, & c) regarding PQRs and a WPS not adequately specifying essential and non-essential variables, and a welder not being qualified in accordance with the WCM requirements. (Inspection Note 003-63)
A-06-AMWTP-RPPWTP-003-A10	Assessment Follow-up Item	BNI and FDT efforts to address FDT Respirator Program Issues. (Inspection Note 003-64)
A-06-AMWTP-RPPWTP-003-A11	Assessment Follow-up Item	Electrical grounding NEC violation; Intermech connexes not grounded locally. Entered as an AFI for tracking. (Inspection Note 003-62)
Closed		
A-06-AMWTP-RPPWTP-001-F11	Finding	Follow-up on Contractor actions to address failure to document a non-compliant tank nozzle shop weld preparation on a Construction Deficiency Report. (Inspection Note 003-59)
A-05-AMWTP-RPPWTP-002-A05	Assessment Follow-up Item	Follow-up on Contractor actions to address the use of unlisted materials when using a prequalified weld procedure. (Inspection Note 003-61)
A-06-AMWTP-RPPWTP-003-A01	Assessment Follow-up Item	Electrical NEC grounding/bonding Finding entered as an AFI for tracking and tending. (Inspection Note 003-05)
A-06-AMWTP-RPPWTP-003-A02	Assessment Follow-up Item	Electrical NEC fuse rating (High Mast lighting Finding entered as an AFI for tracking and tending. (Inspection Note 003-48)
A-06-AMWTP-RPPWTP-003-A11	Assessment Follow-up Item	Electrical grounding NEC violation; Intermech connexes not grounded locally. Entered as an AFI for tracking. (Inspection Note 003-62)

List of Inspection Notes Issued During the Assessment Period:

Inspection Note Number	Inspection Subject
A-06-AMWTP-RPPWTP-003-01	Forms, Rebar and Embedment (FRE) LAB 0011C.
A-06-AMWTP-RPPWTP-003-02	Pressure testing of LAB Piping in July.
A-06-AMWTP-RPPWTP-003-03	Pressure testing of BOF Piping in July.
A-06-AMWTP-RPPWTP-003-04	Electrical - LAW Rod Room Panelboard.
A-06-AMWTP-RPPWTP-003-05	Electrical - LAW electrical shop tent panel.
A-06-AMWTP-RPPWTP-003-06	Emergency Drill at LAB.
A-06-AMWTP-RPPWTP-003-07	LOTO tagging issue at PTF.
A-06-AMWTP-RPPWTP-003-08	Event Investigations Assessment.
A-06-AMWTP-RPPWTP-003-09	CY 2005 Occurrence Report Reviews.
A-06-AMWTP-RPPWTP-003-10	Electrical - BOF Tool Room #5 modifications.
A-06-AMWTP-RPPWTP-003-11	Electrical - BOF Cement Finisher Connex.
A-06-AMWTP-RPPWTP-003-12	Welding - Fit-up LAW Evaporator Process Line.
A-06-AMWTP-RPPWTP-003-13	FRE inspection LAB Hot Cell ACC-0021.
A-06-AMWTP-RPPWTP-003-14	Construction Training Program Assessment.
A-06-AMWTP-RPPWTP-003-15	Welding - LAW instrument service line fit-up.
A-06-AMWTP-RPPWTP-003-16	FRE inspection LAB Slab 0011D.
A-06-AMWTP-RPPWTP-003-17	Electrical - High Voltage Work Activities.
A-06-AMWTP-RPPWTP-003-18	Electrical Safety Assessment.
A-06-AMWTP-RPPWTP-003-19	Concrete Placement LAB ACC-011D.
A-06-AMWTP-RPPWTP-003-20	Quality Control Program Review.
A-06-AMWTP-RPPWTP-003-21	Electrical Inspection LAW Temporary Power.
A-06-AMWTP-RPPWTP-003-22	Falling Object Controls in LAW and LAB.
A-06-AMWTP-RPPWTP-003-23	FRE inspection LAB slab 0015A.
A-06-AMWTP-RPPWTP-003-24	Electrical BOF electrician's shop.
A-06-AMWTP-RPPWTP-003-25	LAW 48"HVAC vent stack installation.
A-06-AMWTP-RPPWTP-003-26	Pressure testing of BOF Piping August.
A-06-AMWTP-RPPWTP-003-27	Welding LAW 18" Piping, Off gas/ vessel vent.
A-06-AMWTP-RPPWTP-003-28	Welding LAW Pipe Support -21".
A-06-AMWTP-RPPWTP-003-29	FRE and Concrete Placement, BOF ductbank.
A-06-AMWTP-RPPWTP-003-30	Welding BOF Rad Transfer Line.
A-06-AMWTP-RPPWTP-003-31	Pressure Testing LAB RLD Line.
A-06-AMWTP-RPPWTP-003-32	BNI Respiratory Protection Program.
A-06-AMWTP-RPPWTP-003-33	Electrical LAW Glovebox wiring.
A-06-AMWTP-RPPWTP-003-34	LAW Cementitious fireproofing installation.
A-06-AMWTP-RPPWTP-003-35	HDPE shrink wrap installation.
A-06-AMWTP-RPPWTP-003-36	LAW Q siding installation.
A-06-AMWTP-RPPWTP-003-37	Electrical LOTO for Rebar Bending Machine.
A-06-AMWTP-RPPWTP-003-38	WTP Take Cover Drill.
A-06-AMWTP-RPPWTP-003-39	Pressure Testing LAB piping in August.
A-06-AMWTP-RPPWTP-003-40	FRE LAB slab 0015B.
A-06-AMWTP-RPPWTP-003-41	Concrete Placement LAB slab 0015B.
A-06-AMWTP-RPPWTP-003-42	Work Package Control review.
A-06-AMWTP-RPPWTP-003-43	Leak Testing of LAW Vent Stack.

A-06-AMWTP-RPPWTP-003-44	Welding LAW Electrical support.
A-06-AMWTP-RPPWTP-003-45	Weld inspection of LAW door frame.
A-06-AMWTP-RPPWTP-003-46	Pressure testing BOF ammonia line.
A-06-AMWTP-RPPWTP-003-47	WTP Material Storage Control.
A-06-AMWTP-RPPWTP-003-48	Electrical High Mast Light disconnects.
A-06-AMWTP-RPPWTP-003-49	Supplier inspection HLW and LAW Melters.
A-06-AMWTP-RPPWTP-003-50	Supplier inspection pipe fabrication in Utah.
A-06-AMWTP-RPPWTP-003-51	Leak testing of LAW ductwork C3 vent stack.
A-06-AMWTP-RPPWTP-003-52	Electrical, grounding of at cooling tower building.
A-06-AMWTP-RPPWTP-003-53	Diesel Fire water pumps start.
A-06-AMWTP-RPPWTP-003-54	LAW Tower Crane jib removal.
A-06-AMWTP-RPPWTP-003-55	BNI Lessons Learned Program Review.
A-06-AMWTP-RPPWTP-003-56	LAW C5 Duct testing for Stack.
A-06-AMWTP-RPPWTP-003-57	Welding LAW Piping.
A-06-AMWTP-RPPWTP-003-58	BOF Pressure Testing September.
A-06-AMWTP-RPPWTP-003-59	Closure of A-06-AMWTP-RPPWTP-001-F11.
A-06-AMWTP-RPPWTP-003-60	Human Performance Improvement.
A-06-AMWTP-RPPWTP-003-61	Closure of A-05-AMWTP-RPPWTP-002-A05.
A-06-AMWTP-RPPWTP-003-62	Electrical Intermech Connexes.
A-06-AMWTP-RPPWTP-003-63	Weld Program Review.
A-06-AMWTP-RPPWTP-003-64	Hazards Control Program Review
A-06-AMWTP-RPPWTP-003-65	Security Program Review.