



U.S. Department of Energy
Office of River Protection

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

05-WTP-069

Mr. J. P. Henschel, Project Director
Bechtel National, Inc.
2435 Stevens Center
Richland, Washington 99352

Dear Mr. Henschel:

CONTRACT NO. DE-AC27-01RV14136 – INSPECTION REPORT A-05-AMWTP-RPPWTP-001 – ON-LOCATION INSPECTION REPORT OF CONSTRUCTION PERFORMANCE OF THE WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) FOR THE PERIOD DECEMBER 16, 2004, THROUGH MARCH 31, 2005

This letter forwards the results of the U.S. Department of Energy, Office of River Protection (ORP) review of Bechtel National, Inc. (BNI) construction performance of the WTP for the period December 16, 2004, through March 31, 2005. One hundred and nineteen specific inspections were completed during this period.

Construction continued to perform acceptably. However, issues were identified regarding subcontractor and BNI electrical code compliance and a supplier's use of Request for Information forms to obtain and use design change information circumventing the approved Supplier Deviation Disposition Request program. BNI was taking actions at the end of the inspection period to address these issues and ORP will review these actions once they are completed. A summary of the inspection is documented in the enclosed inspection report.

If you have any questions, please contact me, or your staff may call Mike Thomas, Operations and Commissioning Team Leader, (509) 373-5014.

Sincerely,

Roy J. Schepens
Manager

WTP:JWM

Enclosure

cc w/encl:
R. Davis, BNI
W. R. Spezialetti, BNI

U.S. DEPARTMENT OF ENERGY
Office of River Protection

INSPECTION: On-location Inspection Report for the Period December 16, 2004, through
March 31, 2005

REPORT NO.: A-05-AMWTP-RPPWTP-001

FACILITY: Bechtel National, Inc. (BNI)

LOCATION: 2435 Stevens Center
Richland, Washington 99352

DATES: December 16, 2004, through March 31, 2005

INSPECTORS: J. McCormick-Barger, Construction Inspection Lead
J. Bruggeman, ORP Facility Representative
S. Pfaff, ORP Facility Representative
B. Harkins, 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 December 16, 2004, through March 31, 2005, 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 119 inspections of various construction activities summarized below. Copies of the inspection notes are available upon request.

Significant Observations and Conclusion

- Contractor oversight of sub-contractor work was generally acceptable. One item for improvement was noted early in the assessment period regarding lack of documentation of electrical work oversight. BNI's Lead Subcontract Coordinator agreed improvement in electrical inspections was warranted and explained that additional electrical personnel had been hired and assignments clarified. Late in the assessment period, during walk down of the Fuel Oil Pump House Building 81 and Fire Water Pump House Buildings 84A and 84B, 15 National Electric Code (NEC) violations were identified. These deficiencies were identified following Contractor walkdown of the buildings as part of the effort to accept subcontractor work. Although it had been reported that the Contractor's construction electrical department had inspected the buildings during the walk downs, subsequently, after being informed of the deficiency list, the Contractor stated the buildings had not been inspected by the electrical department. Some of the issues were recurring, having been noted in prior DOE inspection notes. Specifically, recurring deficiencies included failure to meet requirements regarding electrical equipment being listed/labeled or certified by a Nationally Recognized Testing Laboratory and AC power not being routed through separate wireways or separated with a divider from 24 VDC within enclosures, and various grounding configuration problems. Lack of adequate in-process electrical inspections and/or lack of good communications regarding the performance of electrical department walkdowns as part of the acceptance of subcontractor work indicated improvements were needed in this area. Follow-up on the Contractor's efforts to address the Contractor subcontractor oversight issues and to address the specific electrical issues will be tracked as assessment follow-up item **A-05-AMWTP-RPPWTP-001-A05**. (Inspection Notes 001-01 and 001-105)
- During a supplier site inspection at West Metal Works, Inc. (WMW), in Buffalo NY, WMW's quality assurance program was found to be generally acceptable. Several minor errors regarding welder and quality control personnel qualifications were identified and being addressed. NCRs were dispositioned "use-as-is" without Contractor approval (required by WMW and the Contractor's quality assurance manuals). In addition, a significant issue regarding design control was identified. WMW's practice of proceeding with fabrication based on verbal direction from BNI engineering or based on disposition of Request For Information (RFI) forms with a promise of a future design change was outside of the Contractor's quality assurance and engineering design programs, resulting in WMW

proceeding at risk and the potential for procurement items being substantially delayed should the promised design changes not be issued. The Contractor's Supplier Quality Verification program was not effective in identifying vendor performance issues early on to avoid potential costly rework. Follow-up of the Contractor's actions to address the use of RFIs to communicate design/specification changes and failure of WMW to obtain BNI approval of NCRs with "use-as-is" dispositions will be tracked as assessment follow-up item **A-05-AMWTP-RPPWTP-001-A04**. (Inspection Note 001-104)

- With one exception, the Contractor was adequately implementing its Measuring and Test Equipment (M&TE) program. An assessment follow-up item was issued to track resolution of a CAR regarding the Contractor allowing Original Equipment Manufacturers (OEM's) to calibrate M&TE equipment, manufactured by them, without requiring the OEMs to be on the Approved Suppliers Lists (ASL) or otherwise providing technical justification for using the OEM to calibrate the M&TE equipment. Follow-up will be tracked as assessment follow-up item **A-05-AMWTP-RPPWTP-001-A02**. (Inspection Note 001-47)
- Although many electrical inspections identified acceptable work, inspections continue to identify NEC code violations associated with both temporary and permanent electrical installations. Code violations included: (1) liquidtight flexible metal conduit installed in concentric knockout of the general distribution rack (GDR)-056 transformer did not have a required grounding bushing installed; (2) power distribution rack (PDR)-009 and 018 equipment grounding conductors were not bonded to the panelboards as required; (3) the grounding conductors for emergency/exit lights were being connected to the armored cable #16 AWG aluminum bare bonding wire rather than a required minimum of a #12 AWG copper wire or #10 AWG aluminum wire; (4) the Contractor had not connected the GDR 052 equipment grounding conductor to the grounding electrode at the 400-amp main disconnect as required; (5) the metal conduit in concentric knockout at the GDR 052 400-amp main disconnect installed at the 225-amp panelboard did not have a grounding bushing installed; (6) the GDR 052 terminal bar was isolated from the metal enclosure; (7) a piece of plywood was bolted to the unistrut rack at a 45 degree angle in front of an existing 200-amp disconnect located at the CB&I fabrication/welding area, violating the 3' working clearance requirement; (8) four conductors were installed in one spilt bolt at the Low Activity Waste (LAW) Welder Rack #5 when only two were allowed; (9) although the bonding jumper required for the T4A Mobile Office temporary power was required to be #4 AWG, a #6 AWG was installed; (10) the T4A Mobile Office temporary power equipment grounding conductor in the 100-amp building disconnect was not connected; (11) Simulator Building Main Distribution Panelboard had a #4 AWG bonding jumper when a #2 AWG was required; and (12) a 100 amp breaker was installed at the temporary power for the T34 Mobile Office when a 90 amp breaker was required to match the conductors installed. (Inspection Notes 001-03, 001-04, 001-16, 001-25, 001-36, 001-38, 001-39, 001-56, 001-57, 001-61, 001-74, 001-80, 001-81, 001-83, 001-87, 001-89, 001-95, 001-115, 001-116)
- Installation of permanent electrical lighting in the High Level Waste (HLW) -21' elevation did not conform to NEC Article 410-14(b) requirements regarding providing suitable openings in the back of lighting fixtures to provide access to the conduit boxes. The

Contractor had requested an NEC code variation from the Authority Having Jurisdiction to allow this condition. Resolution of this issue will be tracked as Assessment Follow-up Item **A-05-AMWTP-RPPWTP-001-A06**. (Inspection Note 001-49)

- Testing of the LAW -21' elevation C2 and C3 exhaust ductwork confirmed quality of workmanship and compliance to applicable contract and code requirements. (Inspection Note 001-05)
- Welding of nozzles associated with the Primary Off Gas Scrubber Condensate Vessel HOP-VSL-00903 was being performed in accordance with applicable design and code requirements. (Inspection Note 001-07)
- Welding of HLW Facility 8" Non Radioactive liquid Waste Drain, Laboratory (LAB) 4" Radioactive Liquid Waste Disposal, and Pretreatment Facility (PTF) 1" Demineralized Water system piping, and Plant Wash and Disposal system Ejector 00046 was being performed in accordance with applicable design and code requirements. (Inspection Notes 001-09, 001-14, 001-24, and 001-88)
- Based on a construction configuration management review, the Contractor had an adequate field process to control plant configuration. (Inspection Notes 001-11 and 001-48)
- 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. (Inspection Notes 001-12, 001-13, 001-22, 001-29, 001-32, 001-33, 001-43, 001-44, 001-45, 001-46, 001-54, 001-58, 001-59, 001-69, 001-70, 001-71, 001-72, 001-73, 001-78, 001-79, 001-93, 001-94, 001-97, 001-98, 001-99, 001-100, 001-101, 001-106, 001-107, 001-108, 001-112, and 001-117)
- LAB earthen backfill placements and compaction testing for the mud mat to elevation 654' and areas surrounding the C5, C2, and C3 cells were being performed in accordance with engineering requirements. (Inspection Notes 001-17 and 001-55)
- Inconsistent color coding of isolated grounding conductors between WTP facilities was identified during the assessment period. After discussing this issue with the Contractor's Resident Engineer, Central Engineering issued a Design Change Notice against drawing 24590-WTP-E9-00050, *Electrical Standards Grounding Notes*, to standardize the site grounding color coding scheme. (Inspection Note 001-18)
- PTF liner plate installations within a pipe chase located at 0'-0" elevation column lines E and 15 & 16 and within ring beams of vessels Plant Wash and Disposal System (PWD) 15 and 16 were performed in accordance with applicable design and code requirements. (Inspection Notes 001-19 and 001-26)
- The Contractor had purchased and installed reinforcement steel, embeds, and/or electrical grounding material at the WTP in accordance with appropriate procedures, specifications,

and code requirements. (Inspection Notes 001-20, 001-21, 001-53, 001-67, 001-82, 001-84, 001-86, 001-90, 001-92, and 001-118)

- The Pro-Tect Shrink Wrap used to encase the outer walls of the LAW met the requirements of NFPA 701 for flammability by review of the MSDS test data. Additionally, necessary protection against possible fire damage or loss resulting from the use of spark and heat producing devices was adequate. (Inspection Note 001-23)
- The Contractor and three subcontractor (CB&I, Intermech Inc., and Patriot Fire Protection) confined space procedures were generally adequate. Some minor issues were found with the Contractor's procedure (GPP-SIND-007). In addition, from a comparison of the confined space requirements in 29 CFR 1910.146(f), the entry permits should have included several items that the Contractor's permit did not address. These concerns were addressed during a subsequent procedure revision. An implementation issue was identified concerning failure to perform required annual reviews of canceled confined space entry permits. Follow-up to verify the issues described above were addressed was tracked as assessment follow-up item **A-05-AMWTP-RPPWTP-001-A01**. This item was closed at the end of this inspection period after the issues were addressed. (Inspection Notes 001-27 and 001-110)
- Two pipe supports in the PTF room P-0108C, located around Waste Feed Receipt Vessel FRP-VSL-00002D, were installed in accordance with applicable design and code requirements. (Inspection Note 001-30)
- PTF Plant Wash Disposal Vessels 00015 and 00016 and Vessels TLP-VSL-00009A and 9B were upended, off loaded, and installed in accordance with the approved rigging packages. (Inspection Notes 001-31 and 001-40)
- An accident occurred at the WTP on January 17, 2005, where a non-manual employee slipped and fell, fracturing the fibula in his right leg. The Contractor had taken adequate actions to respond to and investigate the accident, and had taken appropriate corrective actions to prevent recurrence. (Inspection Note 001-34)
- LAW Fan Coil Units met the requirements of the applicable Engineering Specification as documented by the Contractor's supplier quality verification inspections, the supplier testing/inspection documentation, and field inspection of the units. (Inspection Note 001-35)
- Cable pulls routed from 480 volt load-center LVE-LC-91004-01G located in BOF Switchgear Building 91 to motor control center LVE-MCC-83001A located in Cooling Tower Building 83 were performed in accordance with the established design. (Inspection Note 001-38)
- Stairway and ladder usage at the WTP site was adequate. No discrepancies were found in stairway and ladder configuration, inspection, tagging, or usage. Two stairways in the LAW Facility, going from the +3 foot elevation to the -21 foot elevation, had stairrail systems against the concrete wall that did not provide an adequate handhold for employees to grasp.

The stairways did have a stairrail system along the unprotected edge, thus complying with code requirements. The Contractor was aware of the condition and had requested Design Engineering to modify the stairrail system to add a handrail connected directly to the concrete wall. (Inspection Note 001-41)

- Scaffolding at the WTP Site was satisfactory. No discrepancies were found in scaffolding configuration, inspection, tagging, or usage. (Inspection Note 001-42)
- Based on a joint team survey of the Contractor's security program and implementation performed by DOE-RL Security and Emergency Services Division and ORP security representatives, all applicable elements of the Contractor's security program were rated satisfactory. (Inspection Note 001-50)
- The machining and measurement of four piping nozzle end preparation activities on the 903 SBS Condensate Receipt Vessel were completed satisfactorily in accordance with the construction work package. Field engineering was observed performing an adequate confirmatory check on one of the nozzles. (Inspection Note 001-51)
- The Construction training program and implementation was adequate. One area for improvement concerned applicable required reading documents not being automatically identified on individual training profiles after they attended the training course. (Inspection Note 001-52)
- Ultrasonic testing of the PTF 4'x4' crane rail support embeds was performed in accordance with design and code requirements. (Inspection Note 001-60)
- During installation of bolts in LAW structural steel using a drift pin to assist in alignment of the holes, the pin became an airborne projectile falling to decking material below while traveling about 40 feet horizontally. The pin missed a worker by 6 to 12 inches. The Contractor took adequate corrective actions to address the event. (Inspection Note 001-65)
- The Contractor adequately prepared for and set LAW +3 foot elevation vessels (LFP-VSL-00001, LFP-VSL-00002, LFP-VSL-00003, LFP-VSL-00004, and LCP-VSL-00002) in accordance with the applicable requirements. (Inspection Note 001-66)
- The Contractor's process for event investigation was adequate but the filing of Occurrence Notification Reports needed to be improved. An assessment follow-up item to verify Occurrence Notification Reports are being filed within the specified time period will be tracked as assessment follow-up item **A-05-AMWTP-RPPWTP-001-A03**. (Inspection Note 001-68)
- Although the Contractor's procedure for conducting electrical inspections was adequate, the Contractor's primary electrical inspector was not adequately implementing the procedure in that he was not documenting identified NEC code violations as required by the procedure. In addition, he was not notifying the ORP inspector of all of his inspections to allow the

inspector the opportunity to accompany him on his inspections. This was a previous Contractor agreed upon arrangement to avoid unnecessary dual access to electrical panels. These issues were discussed with construction management and the issues were resolved. (Inspection Note 001-75)

- The Contractor was performing radiography on the long seams for HLW hastelloy pipe and fittings in accordance with the Contractor's radiographic procedure. (Inspection Note 001-76)
- The Contractor's actions to investigate and implement corrective actions to a carbon monoxide alarm event at the LAW were adequate. (Inspection Note 001-77)
- The Contractor's actions to investigate and implement corrective actions to an event where a labor broke a bone in his left ankle moving angle iron at the LAW were adequate. (Inspection Note 001-85)
- With one exception, the Contractor rigged and installed the High Level Waste Facility, Silver Mordenite Columns (Melter Offgas Treatment Process System HOP-ABS-00002 and 00003) into the installed support frames, including installing the vendor provided insulation inside the support frame, in accordance with the approved rigging package and engineering specification. During the lifting and placement of the Silver Mordenite Columns, the wire slings suspending the load came in contact on several occasions with protruding rebar. The HLW rigging superintendent stated in the future he would take precautions to ensure rigging stay clear of rebar. (Inspection Note 001-91)
- The Contractor's Hazardous Communication program was adequately written and implemented. Construction staff was aware of the program and aware of the location of Material Safety Data Sheets. (Inspection Note 001-96)
- Lockout/tagout and NFPA 70E safety precautions associated with isolating the construction site main switchgear and some substations to support work to install insulation boots on 480 volt terminations and to install new cabling into a substation were adequately implemented. Arc blast protective clothing was adequately used and stored. (Inspection Note 001-102)
- Appropriate Hazardous Work Permit controls were being implemented during PTF welding work above a propane manifold. (Inspection Note 001-103)
- The Contractor's recently issued *Electrical Safety in the Workplace* procedure adequately implemented NFPA 70E electrical safety requirements. (Inspection Note 001-109)
- The Contractor had an active Construction Management Assessment program that provided focused self-assessments of construction processes to measure performance and identify issues needing attention. (Inspection Note 001-111)

- The Contractor conducted an extensive review of site welding practices in response to an Energy Facility Contractors Group (EFCOG) memorandum dated January 11, 2005, regarding concerns with some non-WTP contractor weld rod control programs. (Inspection Note 001-114)
- PTF hot cell floor stanchion welding was being performed in accordance with design and installation requirements and the applicable welding code. (Inspection Note 001-119)

List of Assessment Items Opened, Closed, and Discussed

Opened

A-05-AMWTP-RPPWTP-001-A01	Assessment Follow-up Item	Follow-up on Contractor actions to address confined space procedure issues. (Inspection Note 001-27.)
A-05-AMWTP-RPPWTP-001-A02	Assessment Follow-up Item	Follow-up on Contractor actions to address lack of Original Equipment Manufacturer to be on the approved suppliers list when Calibrating M&TE. (Inspection Note 001-47.)
A-05-AMWTP-RPPWTP-001-A03	Assessment Follow-up Item	Follow-up on Contractor actions to address Contractor actions to improve Occurrence Report timeliness. (Inspection Note 001-68.)
A-05-AMWTP-RPPWTP-001-A04	Assessment Follow-up Item	Follow-up on Contractor actions to address the use of RFIs to communicate design/specification changes and the failure of WMW to obtain BNI approval of NCRs with “use-as-is” dispositions. (Inspection Note 001-104.)
A-05-AMWTP-RPPWTP-001-A05	Assessment Follow-up Item	Follow-up on Contractor actions to address 15 electrical issues regarding the Fuel Oil Pump House Building 81 and Fire Water Pump House Buildings 84A & 84B and subcontractor electrical oversight issues. (Inspection Note 001-105.)
A-05-AMWTP-RPPWTP-001-A06	Assessment Follow-up	Follow-up on Contractor actions to address NEC violation regarding lack of suitable

Item openings in the back of HLW -21' elevation lighting fixtures. (Inspection Note 001-49.)

Closed

A-04-AMWTP-RPPWTP-002-A02 Assessment Follow-up Item Follow-up on Contractor actions to address bonding of fueling trucks to items being fueled. (Inspection Note 001-02.)

A-04-AMWTP-RPPWTP-003-A03 Assessment Follow-up Item Follow-up on supplier's actions (Harris Thermal Transfer Products) to issue a suspect counterfeit parts procedure. (Inspection Note 001-10.)

A-04-AMWTP-RPPWTP-003-F05 Finding Failure of the quality assurance organization to have independent qualified personnel review and accept radiographs associated with QL component or equipment weld acceptance as required by QAM Policy Q-10.1. (Inspection Note 001-113.)

A-04-AMWTP-RPPWTP-003-A06 Assessment Follow-up Item Follow-up on sub-contractor actions to address 'utilization record' errors associated with radiography activities. (Inspection Note 001-06.)

A-04-AMWTP-RPPWTP-003-A07 Assessment Follow-up Item Follow-up on sub-contractor actions to revise its Radiation Safety Program procedure to clearly specify survey instrument functional testing requirements. (Inspection Note 001-06.)

A-04-AMWTP-RPPWTP-003-A08 Assessment Follow-up Item Follow-up on sub-contractor actions to correct the radioactive source label attached to the gamma camera. (Inspection Note 001-06.)

A-04-AMWTP-RPPWTP-003-A09 Assessment Follow-up Item Follow-up on Contractor and sub-contractor action to correct Industrial Health and Safety issues with sub-contractor IS&H Plans and performance. (Inspection Note 001-08.)

A-04-AMWTP-RPPWTP-004-F01	Finding	Failure of the Contractor to ensure permanent plant equipment (Spent Resin Dewatering Skid RDP-SKID-00001) complied with purchase order requirements and specified code requirements. (Inspection Note 001-63.)
A-04-AMWTP-RPPWTP-004-A03	Assessment Follow-up Item	Follow-up on Contractor actions to resolve issues regarding electrical equipment not being listed and labeled, and ground wire color coding inconsistencies. (Inspection Note 001-62.)
A-04-AMWTP-RPPWTP-004-A06	Assessment Follow-up Item	Follow-up on Contractor actions to address Power City Electric mobile office electrical deficiencies (the power disconnect was located on the mobile office and there was no installed grounding electrode). (Inspection Note 001-28.)
A-04-AMWTP-RPPWTP-004-A07	Assessment Follow-up Item	Follow-up on Contractor actions to address T5A Change House Trailer electrical deficiencies. (Inspection Note 001-15.)
A-05-AMWTP-RPPWTP-001-A01	Assessment Follow-up Item	Follow-up on Contractor actions to address confined space procedure issues. (Inspection Note 001-110.)

List of Inspection Notes Issued During the Assessment Period:

<u>Inspection Note Number</u>	<u>Inspection Subject</u>
A-01-AMWTP-RPPWTP-001-01	Inspection and Acceptance of Subcontractor Work.
A-01-AMWTP-RPPWTP-001-02	Use of Electrical Bonding Straps during Fueling.
A-01-AMWTP-RPPWTP-001-03	Electrical Inspection of BOF GDR 056.
A-01-AMWTP-RPPWTP-001-04	Electrical Inspection of BOF GDR 050.
A-01-AMWTP-RPPWTP-001-05	Leak Test of LAW -21' Ductwork.
A-01-AMWTP-RPPWTP-001-06	Closure of A-04-AMWTP-RPPWTP-003-A06 through -A08.
A-01-AMWTP-RPPWTP-001-07	Welding Inspection of HLW Vessel 903 Nozzle N-31 and Pipe to Pipe Welds.
A-01-AMWTP-RPPWTP-001-08	Closure of A-04-AMWTP-RPPWTP-003-A09.
A-01-AMWTP-RPPWTP-001-09	Weld Inspection of HLW 8" Non-Radioactive Liquid Waste Drain System Piping.

A-01-AMWTP-RPPWTP-001-10	Closure of A-04-AMWTP-RPPWTP-003-A03.
A-01-AMWTP-RPPWTP-001-11	Configuration Management Program Review.
A-01-AMWTP-RPPWTP-001-12	Hydrostatic test of Portions of the Firewater System.
A-01-AMWTP-RPPWTP-001-13	Hydrostatic test of BOF 3” SS RAD Transfer Line.
A-01-AMWTP-RPPWTP-001-14	Weld Inspection of LAB 4” Radioactive Liquid Waste Disposal System Piping.
A-01-AMWTP-RPPWTP-001-15	Closure of A-04-AMWTP-RPPWTP-004-A07.
A-01-AMWTP-RPPWTP-001-16	Electrical Inspection of HLW PDR-009.
A-01-AMWTP-RPPWTP-001-17	Review of Backfill and Compaction of LAB.
A-01-AMWTP-RPPWTP-001-18	Review of Isolated Grounding Conductor Identification (Color Coding Inconsistencies).
A-01-AMWTP-RPPWTP-001-19	PTF Liner Plate Installation Inspection.
A-01-AMWTP-RPPWTP-001-20	PTF Slab 28-05 Concrete Placement Inspection.
A-01-AMWTP-RPPWTP-001-21	Forms, Rebar, Embeds (FRE) Inspection of PTF 28-05.
A-01-AMWTP-RPPWTP-001-22	Hydrostatic Testing of BOF Chilled Waster Distribution System Piping.
A-01-AMWTP-RPPWTP-001-23	Inspection of LAW Pro-Tect Shrink Wrap.
A-01-AMWTP-RPPWTP-001-24	Weld Inspection of PTF 1” Demin Water System.
A-01-AMWTP-RPPWTP-001-25	Electrical Inspection of Switchgear Building 87.
A-01-AMWTP-RPPWTP-001-26	PTF Liner Plate Installation.
A-01-AMWTP-RPPWTP-001-27	Confined Space Entry Program Review.
A-01-AMWTP-RPPWTP-001-28	Closure of A-04-AMWTP-RPPWTP-004-A06.
A-01-AMWTP-RPPWTP-001-29	Hydrostatic Testing of BOF 12” Firewater System Piping.
A-01-AMWTP-RPPWTP-001-30	Welding of Pipe Supports in PTF Room P-0108C.
A-01-AMWTP-RPPWTP-001-31	Rigging and Placing of PTF Plant Waste Disposal Vessels 00015 & 16.
A-01-AMWTP-RPPWTP-001-32	Hydrostatic Testing of HLW Inner Coaxial Piping.
A-01-AMWTP-RPPWTP-001-33	Pneumatic Testing of HLW Outer Pipe on Coaxial Piping.
A-01-AMWTP-RPPWTP-001-34	Accident Investigation Review (BOF Fractured Fibula).
A-01-AMWTP-RPPWTP-001-35	LAW Fan Coil Unit Installations.
A-01-AMWTP-RPPWTP-001-36	Electrical Inspection of PDR-018.
A-01-AMWTP-RPPWTP-001-37	Pneumatic Testing of BOF Radioactive Liquid Waste Disposal Line (Inner Lines of 4 Coax Pipe).
A-01-AMWTP-RPPWTP-001-38	BOF Switchgear Building 91 to Cooling Tower Building 83 Cable Pulls.
A-01-AMWTP-RPPWTP-001-39	Electrical Inspection of HLW -21’ Temporary and Emergency Lighting.
A-01-AMWTP-RPPWTP-001-40	Unloading of PTF Vessels TP-VSL-00009A & 9B.
A-01-AMWTP-RPPWTP-001-41	Stairway and Ladder Usage at the WTP.
A-01-AMWTP-RPPWTP-001-42	Scaffolding Usage at the WTP.

A-01-AMWTP-RPPWTP-001-43	Pneumatic Testing of HLW Outer Coax Piping.
A-01-AMWTP-RPPWTP-001-44	Pneumatic Testing of HLW Outer Coax Piping.
A-01-AMWTP-RPPWTP-001-45	Pneumatic Testing of BOF Outer Coax Piping.
A-01-AMWTP-RPPWTP-001-46	Pneumatic Testing of BOF Inner Coax Piping.
A-01-AMWTP-RPPWTP-001-47	M&TE Program Review.
A-01-AMWTP-RPPWTP-001-48	Construction Configuration Management Review.
A-01-AMWTP-RPPWTP-001-49	Electrical Inspection of HLW -21" Lighting.
A-01-AMWTP-RPPWTP-001-50	Safeguards and Security Review.
A-01-AMWTP-RPPWTP-001-51	HLW 903 Vessel Pipe Nozzle Preps.
A-01-AMWTP-RPPWTP-001-52	Construction Training Program Review.
A-01-AMWTP-RPPWTP-001-53	Placement and Testing of Concrete for PTF Wall 3-36.
A-01-AMWTP-RPPWTP-001-54	Pneumatic Testing of BOF Coax Piping.
A-01-AMWTP-RPPWTP-001-55	LAB Backfill and Compaction Activities.
A-01-AMWTP-RPPWTP-001-56	Electrical Inspection of PT-GDR-052.
A-01-AMWTP-RPPWTP-001-57	Electrical Inspection of 200 amp Disconnect.
A-01-AMWTP-RPPWTP-001-58	10' Static Head Pressure Test of LAB RLD Piping.
A-01-AMWTP-RPPWTP-001-59	Hydro Test of Main Steam Line in Steam Plant.
A-01-AMWTP-RPPWTP-001-60	Review of UT Testing of PTF Crane Embeds.
A-01-AMWTP-RPPWTP-001-61	Electrical Inspection of BOF Welder Rack #5.
A-01-AMWTP-RPPWTP-001-62	Closure of A-04-AMWTP-RPPWTP-004-A03.
A-01-AMWTP-RPPWTP-001-63	Partial Closure of A-04-AMWTP-RPPWTP-004-F01.
A-01-AMWTP-RPPWTP-001-64	Closure of A-04-AMWTP-RPPWTP-004-F01.
A-01-AMWTP-RPPWTP-001-65	Accident Investigation Review (LAW Near Miss Falling Drift Pen)
A-01-AMWTP-RPPWTP-001-66	Setting of LAW Vessels LFP-VSL-00001, 2, 3, and 4, and LCP-VSL-00002.
A-01-AMWTP-RPPWTP-001-67	Inspection of FRE for LAW Slab 107.
A-01-AMWTP-RPPWTP-001-68	BNI Event Investigation Program Review.
A-01-AMWTP-RPPWTP-001-69	Hydro Testing of BOF Plant Cooling Water Lines.
A-01-AMWTP-RPPWTP-001-70	Hydro Testing of BOF Firewater System Piping.
A-01-AMWTP-RPPWTP-001-71	Hydro Testing of BOF Domestic Water Lines.
A-01-AMWTP-RPPWTP-001-72	Hydro Testing of BOF Demin Water System.
A-01-AMWTP-RPPWTP-001-73	Hydro Testing of BOF Process Water System.
A-01-AMWTP-RPPWTP-001-74	Electrical Inspection of T4A Mobile Office Power.
A-01-AMWTP-RPPWTP-001-75	Electrical Inspection of BNI Electrical Inspection Program.
A-01-AMWTP-RPPWTP-001-76	Radiographs of Hastelloy Pipe Long Seams.
A-01-AMWTP-RPPWTP-001-77	Review of LAW Carbon Monoxide Alarm Event.
A-01-AMWTP-RPPWTP-001-78	Hydro of BOF Firewater System.
A-01-AMWTP-RPPWTP-001-79	Hydro Testing of LAB RAD Transfer Lines.
A-01-AMWTP-RPPWTP-001-80	Electrical Inspection of Simulator Building.
A-01-AMWTP-RPPWTP-001-81	Electrical Inspection of Mobile Office T-49.
A-01-AMWTP-RPPWTP-001-82	FRE Inspection of PTF Bulge Pedestal 3 & 4.

A-01-AMWTP-RPPWTP-001-83	Electrical Inspection of GDR-057.
A-01-AMWTP-RPPWTP-001-84	FRE Inspection of PTF Slab 56-13.
A-01-AMWTP-RPPWTP-001-85	Accident Investigation Review (LAW Labor Broke Ankle)
A-01-AMWTP-RPPWTP-001-86	FRE Inspection of BOF Clayton Coating Building.
A-01-AMWTP-RPPWTP-001-87	Electrical Inspection of BOF T34 Mobile Office.
A-01-AMWTP-RPPWTP-001-88	Weld Inspection of PTF Plant Wash and Disposal System.
A-01-AMWTP-RPPWTP-001-89	Electrical Inspection of PTF Temp Power.
A-01-AMWTP-RPPWTP-001-90	FRE Inspection of BOF Stem Walls of Clayton Coating Building.
A-01-AMWTP-RPPWTP-001-91	HLW Silver Mordenite Column Installation.
A-01-AMWTP-RPPWTP-001-92	FRE Inspection of LAB Basemat.
A-01-AMWTP-RPPWTP-001-93	Pneumatic Testing of LAB Embedded Radioactive Liquid Waste Disposal System.
A-01-AMWTP-RPPWTP-001-94	Pneumatic Testing of BOF Inner RAD Transfer Lines.
A-01-AMWTP-RPPWTP-001-95	Electrical Inspection of BOF PDR-018 and GDR-059.
A-01-AMWTP-RPPWTP-001-96	Hazardous Communication Program Review.
A-01-AMWTP-RPPWTP-001-97	Hydro Test of BOF Domestic Potable Water Piping.
A-01-AMWTP-RPPWTP-001-98	Hydro Test of BOF Process Service Water Piping.
A-01-AMWTP-RPPWTP-001-99	Hydro Test of BOF Demin Water System.
A-01-AMWTP-RPPWTP-001-100	Hydro Test of BOF Non-Radioactive Liquid Waste Disposal System Piping.
A-01-AMWTP-RPPWTP-001-101	Hydro Test of BOF Firewater System Piping.
A-01-AMWTP-RPPWTP-001-102	Lockout/Tagout and Electrical Safety Review of Isolation of Construction Site Main Switchgear.
A-01-AMWTP-RPPWTP-001-103	Hazardous Work Permit Review of PTF Welding above Propane Manifold.
A-01-AMWTP-RPPWTP-001-104	Site Visit to West Metal Works, Inc. Buffalo NY.
A-01-AMWTP-RPPWTP-001-105	Electrical Inspection of the BOF Fuel Oil Pump House and Fire Water Pump Houses (Buildings 81, 84A, & 84B).
A-01-AMWTP-RPPWTP-001-106	Pneumatic Test of LAB 3" and 4" Inner Core Piping.
A-01-AMWTP-RPPWTP-001-107	Pneumatic Test of BOF Outer Encasement Rad Transfer Lines.
A-01-AMWTP-RPPWTP-001-108	Pneumatic Test of BOF RAD Transfer Lines.
A-01-AMWTP-RPPWTP-001-109	Review of <i>Electrical Safety in the Workplace</i> Procedure for NFPA 70E Compliance.
A-01-AMWTP-RPPWTP-001-110	Confined Space Entry Program Review.
A-01-AMWTP-RPPWTP-001-111	BNI Construction Management Assessment Program Review.
A-01-AMWTP-RPPWTP-001-112	Hydro Test of BOF Firewater System Piping.

A-01-AMWTP-RPPWTP-001-113	Closure of Finding A-04-AMWTP-RPPWTP-003-F05.
A-01-AMWTP-RPPWTP-001-114	Participation on a Contractor Welding Program Management Assessment in Response to an EFCOG Weld Rod Control Alert.
A-01-AMWTP-RPPWTP-001-115	Electrical Inspection of LAW Mini Load Centers MLC-31 and MLC-32.
A-01-AMWTP-RPPWTP-001-116	Electrical Inspection of Combo Shop PDR 021.
A-01-AMWTP-RPPWTP-001-117	LAB RLD System 10' Static Head Test.
A-01-AMWTP-RPPWTP-001-118	FRE Inspection of Building 86 Slab.
A-01-AMWTP-RPPWTP-001-119	Welding Inspection of PTF Hot Cell Stanchions.