



U.S. Department of Energy  
~~Office of River Protection~~

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

DEC 05 2005

05-ESQ-074

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

Dear Mr. Henschel:

CONTRACT NO. DE-AC27-01RV14136 – ASSESSMENT REPORT A-05-ESQ-RPPWTP-007  
 – ASSESSMENT OF OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION  
 (OSHA) INJURY/ILLNESS RECORDKEEPING, SEPTEMBER 26 THROUGH  
 OCTOBER 11, 2005

This letter forwards the results of the U.S. Department of Energy, Office of River Protection (ORP) assessment of the Bechtel National, Inc. (BNI) OSHA injury/illness recordkeeping program conducted from September 26 through October 11, 2005 (attached).

The assessor concluded that underreporting of work-related injuries by BNI continues to be an issue. One Finding (A-05-ESQ-RPPWTP-007-F01) described five cases not reported in accordance with OSHA requirements. ORP considers this repeat Finding as a serious issue needing senior management attention. The continuation of underreporting of work-related injuries indicates that corrective actions taken to date have been insufficient and ineffective. In addition to the responses to the individual cases discussed in the Finding, BNI is requested to provide specific actions that will be taken to ensure future reporting is performed in accordance with contract and OSHA requirements.

Please provide the response to the Finding and the BNI corrective actions within 30 days of receipt of this letter. If you have any questions, please contact me, or your staff may call Robert C. Barr, Director, Office of Environmental Safety and Quality, (509) 376-7851.

Sincerely,

Roy J. Schepens  
 Manager

ESQ:PRH

Attachment

cc w/attach:  
 C. M. Davis, BNI  
 G. T. Shell, BNI  
 P. Schuetz, BNI

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

ASSESSMENT: (OSHA) Injury/Illness Recordkeeping Review  
Bechtel National, Inc.

REPORT: A-05-ESQ-RPPWTP-007

FACILITY: Bechtel National, Inc. Waste Treatment Plant

LOCATION: Hanford Site

DATES: September 26 through October 11, 2005

ASSESSORS: Paul Hernandez, Lead Assessor

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

## **Executive Summary**

The U.S. Department of Energy (DOE), Office of River Protection (ORP) conducted an assessment of Bechtel National, Inc.'s (BNI) Occupational Safety and Health Administration (OSHA) injury/illness recordkeeping program. The assessor evaluated the procedural requirements, interviewed employees who had been injured on the job, and examined records pertaining to the assessment subject. The purpose of the assessment was to evaluate the effectiveness of the Contractor's implementation of procedures and practices which satisfy the requirements of OSHA 29 Code of Federal Regulations 1904, "Recording and Reporting Occupational Injuries and Illnesses." Assessment efforts focused on determining the effectiveness of the processes associated with identifying, evaluating, and recording injuries and illnesses on OSHA forms and in the DOE Computerized Accident/Incident Reporting System (CAIRS) database. The assessor paid particular attention to injuries which were compensable by the State of Washington Department of Labor and Industries, but were not reported as OSHA recordable. ORP is required to perform quality checks of the information reported through the CAIRS by its contractors every six months. The last assessment of BNI was performed in March 2005.

The assessor concluded that underreporting of work-related injuries by BNI continues to be an issue. For the March through September 2005 period ORP found five cases not reported in accordance with OSHA requirements. ORP considers this repeat Finding as a serious issue needing senior management attention. The continuation of underreporting of work-related injuries indicates that corrective actions taken to date have been insufficient and ineffective. In addition to the responses to the individual cases discussed in the Finding, BNI is requested to provide specific actions that will be taken to ensure future reporting is performed in accordance with contract and OSHA requirements.

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## **List of Acronyms**

BNI	Bechtel National, Inc
CAIRS	Computerized Accident/Incident Reporting System
DOE	U.S. Department of Energy
L&I	Labor and Industries
NSAIDS	Nonsteroidal Anti-inflammatory Drugs
ORP	Office of River Protection
OSHA	Occupational Safety and Health Administration
SDS	Safety Data System
WTP	Waste Treatment Plant Project

## Occupational Safety and Health Association (OSHA) Injury/Illness Recordkeeping Review Bechtel National, Inc. (BNI)

### **Scope**

From September 26 through October 11, 2005, the U.S. Department of Energy (DOE), Office of River Protection (ORP) conducted an assessment of BNI's OSHA injury/illness recordkeeping program.

### **Details**

The assessor examined relevant documentation including the revised BNI procedure for implementation of the OSHA Recordkeeping Program. The assessor performed evaluations of employee medical records, Computerized Accident/Incident Reporting System (CAIRS) database entries, and "Safety Data System (SDS) First Aid Log" data. The assessor interviewed BNI's Workers Compensation Administrator and reviewed current Labor and Industries (L&I) records for employees who had filed claims. The assessor interviewed four BNI employees who sustained injuries between March and September 2005, as indicated in specific case descriptions. In addition, ORP reviewed the cases detailed in this report with the OSHA Subject Matter Expert in the Bellevue, Washington, Area Office.

#### Review of Procedures

DOE's review of the contractor's procedure for the OSHA Recordkeeping Program determined there was a clear process described for reporting injuries for CAIRS and OSHA recordkeeping purposes. BNI procedure 24590-WTP-GPP-SIND-023, Revision 4, Injury/Illness Notification, Investigation, and Reporting," dated September 7, 2005, was determined to meet the minimum requirements in the DOE Environmental, Safety and Health Reporting Manual, DOE M 231.1-1A.

Previous ORP assessments have recommended the good practice of developing injury/illness case files for individual cases as a means for improving BNI's injury/illness recordkeeping. This approach creates a single file containing all pertinent determination of recordability information. BNI's present approach to recordkeeping is not centralized. BNI safety databases are in one location, medical files in another, and Labor and Industries information in a third. ORP recommends that the injury/illness Notification, Investigation, and Reporting procedure be modified to incorporate a process that creates files containing medical records, DOE Individual Accident/Incident Report forms, employee and witness statements, Accident/Incident reports, and a narrative summarizing the chronology of events leading up to the determination of recordability for injuries and illnesses.

The assessor also reviewed procedure 24590-WTP-GPP-SIND-022, Assessment and Issue of Noncompliance for Construction Subcontractor's Safety and Health Compliance. This procedure was developed as part of a corrective action from a previous ORP Injury/Illness Recordkeeping assessment (Finding A-05-ESQ-RPPWTP-002-F02). The assessor determined that the procedure did not provide adequate guidance to ensure BNI subcontractor categorization is performed in accordance with 29 CFR 1904. Specifically, Section 3.3.2, Monitoring and Assessments, does not require the performance of any analysis to determine the recordability of injuries.

#### Comparison of CAIRS Data to Medical Files

The ORP assessor had access to the CAIRS production database for BNI and subcontractors. The data evaluated ranged from March through October 2005. The ORP reviewer analyzed all cases posted in CAIRS that indicated an OSHA recordable injury including restricted or lost work days. Using the assigned case numbers from the log, the reviewer accessed the applicable DOE Form 5484.3, "Individual Accident/Incident Reports," for each case. The contents of the 5484.3 forms were then compared to the information in the patient's medical file.

ORP reviewed case files maintained in the Waste Treatment and Immobilization Plant (WTP) onsite first aid clinic, managed by WorkCare. The reviewer found "WTP Medical Status Update," forms in the files which defined formal work restrictions imposed on injured employees. The forms contained sections for listing formal restrictions, date of restriction, duration, and end date, as well as a section describing the work available for the restricted employee. The forms were signed by the employee, their supervisor, and the safety representative. Employees have been instructed that unless the restriction assessment is completed and signed, there were no work restrictions; thus eliminating uncertainties.

ORP found one case BNI reported as non-work related that should have been reported as OSHA recordable.

- Case No. 1391-05, August 10, 2005: An office employee reported for work at 7:00 a.m. At 7:10 a.m. the employee attempted to use her scissors to punch a new hole in her belt because it was fitting loosely. The employee unbuckled the belt and then placed the opened scissors between her belly and the belt holding the scissors in her left hand and the belt in the right. She shoved forward with the scissors to punch the hole and lacerated her right index finger. The employee was transported to Kadlec Emergency Room. It was determined the injury required medical treatment of three sutures (stitches) and prescription medication.

BNI investigated the injury and documented their Findings on a Disposition of Recordability Form, dated August 17, 2005. BNI concluded the injury was non-recordable, stating that OSHA 1904.5(b)(2)(vi) does not require employers to record an injury if the injury is solely the result of personal grooming. ORP consulted with OSHA's Bellevue, Washington, office recordkeeping Subject Matter Expert and

determined BNI was in error with respect to personal grooming. The case is OSHA recordable with medical treatment beyond first aid for the reasons discussed below.

ORP utilized guidance from the following OSHA Website:

<http://www.osha.gov/recordkeeping/detailedfaq.html>, which provided detailed Frequently Asked Questions for OSHA's Injury and Illness Recordkeeping Rule.

*Question 5-3.* What activities are considered “personal grooming” for purposes of the exception to the geographic presumption of work-relatedness in Section 1904.5(b)(2)(vi)?

Answer: “Personal grooming activities are activities directly related to personal hygiene, such as combing and drying hair, brushing teeth, clipping fingernails and the like. Bathing or showering at the workplace when necessary because of an exposure to a substance at work is not within the personal grooming exception in Section 1904.5(b)(2)(vi). Thus, if an employee slips and falls while showering at work to remove a contaminant to which he has been exposed at work, and sustains an injury that meets one of the general recording criteria listed in Section 1904.7(b)(1), the case is recordable.”

ORP interviewed the employee who stated the injury was not a result of personal grooming; only that she made a mistake by using scissors to punch a hole in the belt. BNI disagreed with ORP's determination that the injury was work-related.

ORP found two cases where cases recorded as OSHA recordable should have been reported as OSHA recordable with restricted workdays.

- Case No. 1238-05, March 23, 2005: An employee (ironworker) was lifting a 25 foot piece of #11 rebar from a horizontal position and installing it vertically into wall 1118C. As he was lifting the rebar, it became caught on rebar already installed on the wall. The ironworker was holding the rebar in his right hand and he pulled to free the rebar. As it came free, it pinched his right hand between two pieces of #11 rebar resulting in a contusion and fracture to the right thumb. On March 28, 2005, the employee's personal care physician initiated work restrictions through April 23, 2005. On April 26, 2005, four more weeks were added to the restriction. The employee was laid off on May 3, 2005. The number of restricted workdays should have been at least 33 days. BNI Safety agreed with ORP on this issue and planned to revise the CAIRS database; and
- Case No. 1332-05, June 7, 2005: An employee (apprentice ironworker) was working under a rebar mat spreading rebar with a porta power jack. As the rebar was raised into position the jaw of the machine let loose and struck the worker in the head. The worker crawled out from under the rebar with the help of the journeymen ironworkers and was transported to the WorkCare WTP First Aid Clinic. At home that night the employee's head was still hurting and the employee was throwing up. On the morning of June 8, 2005, the worker went to the Lourdes Hospital Emergency Room



and was diagnosed with a concussion. The worker was issued prescription pain medication to address severe headache pain, had two CAT scans and ultimately required the services of a neurologist. On June 15, 2005, the worker was issued formal work restrictions through June 20, 2005. The restrictions were in the patient's medical file on a WTP Medical Status Update form, complete with required signatures. The restrictions instructed her not to climb, and not to enter restricted areas such as inside rebar mats. BNI considered this case OSHA recordable, but failed to enter the restricted work days. BNI disagreed with ORP's determination that the restricted work days need to be recorded. (ORP interviewed the employee.)

### Comparison of L&I Data to CAIRS Data

The ORP assessor initiated this review using L&I data from BNI's Worker's Compensation Administrator. ORP focused on cases compensated by L&I and were not reported as OSHA recordable by the contractor. In theory, all L&I cases are not necessarily OSHA recordable and conversely all OSHA recordable cases are not necessarily compensable. However, OSHA often reviews L&I records because there may be an overlap. Many cases in which the state is compensating individuals for injuries would be work related, and would likely involve medical treatment beyond first aid. (This is not always true. In some cases, for instance, L&I may pay medical costs to a health care provider for x-rays, to determine if an employee fractured a bone. If the x-ray is negative, and no medical treatment beyond first aid is administered, the injury would not be considered OSHA recordable.)

The ORP reviewer analyzed all cases in the L&I records for the period from March through October 2005 and compared it to the information in the patient's medical file.

The assessor found two cases not reported as OSHA recordable, which should have been. No Determination of Recordability was issued by BNI.

- SDS Case No. 1430, April 13, 2005: At 8:30 a.m. the employee (ironworker) was leaning on his left elbow welding. As he finished he changed position and felt a pop at the point of the elbow. He began having pain and swelling, then later that day sought medical attention at the WorkCare WTP First Aid Clinic. The left elbow had developed swelling and was warm to the touch. He was assessed as having left elbow contusion, effusion, cellulitis, and traumatic bursitis. He was given warm packs, prescribed the antibiotic Keflex and instructed to minimize use of his left elbow. The following morning he returned to the WTP First Aid Clinic and was sent to WorkCare's Kennewick Office. He was diagnosed with bursitis olecranon, traumatic bursitis, and cellulitis. He was instructed to continue taking antibiotics and issued a work restriction to avoid direct pressure on the left elbow. He initiated an L&I claim which the state initially rejected. On June 7, 2005, he protested the L&I determination and wrote a letter stating the condition was not preexisting and that he had not had any problems with his elbow in the past 25 years. He further explained that the injury was sudden, of a traumatic nature, and produced an immediate result. In their June 23, 2005, response L&I reconsidered their decision and allowed the

claim. ORP has determined that this case is OSHA recordable due to the prescription medications administered. Furthermore, the medical file shows restrictions were issued on April 14, 2005. BNI disagreed with ORP's determination that the injury was work-related. (ORP interviewed the employee.); and

- SDS Case No. 2240, April 20, 2005: A night-shift employee (labor foremen) was working on a concrete pour at the High-Level Waste when he climbed through rebar to exit the area. He twisted his knee and heard a pop when he miss-stepped onto grillage. He reported the incident to supervision and was transported to the WorkCare First Aid Clinic. He had pain and tenderness to the area of medial condyle inferior and lateral to the patella. The knee was treated with ice for 20 minutes and the worker refused the offer of nonsteroidal anti-inflammatory drugs (NSAIDS). He returned for another ice treatment later in the shift. The next night (Thursday, April 21, 2005) he returned to the WTP First Aid Clinic complaining of knee stiffness and swelling. He was treated with ice and 400 mg of motrin, and advised to return for another treatment during that shift. The next night (Friday, April 22, 2005) he returned to the WTP First Aid Clinic complaining of knee stiffness and swelling. He was treated with ice and 200 mg of motrin, and advised to return after the weekend.

On Monday, April 25, 2005, he returned to the WTP First Aid Clinic stating he felt improved but complaining of tenderness which may be attributed to his weekend activities. He was found to have a slight non-pitting edema (swelling – accumulation of excess fluid) to the region inferior to the left patella. He was advised to use heat or ice and NSAIDS as needed.

On April 26, 2005, he returned to the WTP First Aid Clinic twice, complaining of stiffness to his left knee with tenderness during twisting motions. He was advised to use heat or ice and NSAIDS, as needed.

On April 27, 2005, he returned to the WTP First Aid Clinic stating he felt improved but complaining of a slight tenderness after performing increased ambulation the previous day. He was given 400 mg motrin.

On April 29, 2005, he returned to the WTP First Aid Clinic stating he felt improved but complaining of a slight tenderness after climbing stairs. He was given 400 mg motrin.

At 2:30 a.m. on May 4, 2005, he ambulated into the WTP First Aid Clinic stating he felt improved and was on the mend, according to the medical file notes. (However, during an interview with ORP, the employee contradicted this, stating that he was still in pain after a couple of weeks. He thought the pain should have been going away.)

At 11:00 a.m. on May 4, 2005, the employee phoned the WTP First Aid Clinic stating he had reinjured his knee at home while leaning over to put on his shoe. He was unable to stand and was instructed to seek appropriate medical care. He reported to the emergency room and was diagnosed with torn cartilage. After consulting a

surgeon, x-rays and MRI indicated torn cartilage and torn patella. He was scheduled for surgery the next day.

On May 5, 2005, surgery was performed and employee was instructed by his personal physician to remain off work until June 13, 2005. On June 13, 2005, he was issued a return to work instruction with the restriction “as tolerated” issued by his personal physician. On July 15, 2005, he was issued a return to full duty work release.

This case should have been an OSHA recordable with restricted and lost workdays since the initiating event can be attributed to the twisted knee injury sustained on April 20, 2005. ORP reached this conclusion based upon 1904.5 (a), “You must consider an injury or illness to be work-related if an event or exposure in the work environment either caused or contributed to the resulting condition.” In addition 1904.5 (b)(3) states, “How do I handle a case if it is not obvious whether the precipitating event or exposure occurred in the work environment or occurred away from work?” In these situations, you must evaluate the employee’s work duties and environment to decide whether or not one or more events or exposures in the work environment either caused or contributed to the resulting condition...” BNI disagreed with ORP’s determination that the injury was work-related. (ORP interviewed the employee.)

#### Review of Subcontractor OSHA Recordkeeping

During the March 2005 ORP assessment of OSHA recordkeeping, the assessor found weaknesses in BNI’s oversight of major subcontractors. There was a lack of documented evidence that BNI had performed oversight on WTP subcontractors. BNI failed to demonstrate they had performed comparison of OSHA 300 and first aid logs to injuries reported by their subcontractors. In addition, BNI had not assessed the appropriateness of OSHA recordability (i.e., categorization) against the requirements of 29 CFR 1904.

BNI’s actions in response to this Finding included the performance of several surveillances in accordance with a new procedure, “Assessment and Issue of Noncompliance for Construction Subcontractor’s Safety and Health Compliance,” effective August 22, 2005. The procedure does not assure adequate assessment of the appropriateness of categorization under 29 CFR 1904 by BNI on its subcontractors. In Section 3.3.2, Monitoring and Assessments, the procedure is silent on the performance of analysis for the recordability of injuries. Appendix C of the procedure is a one-page checklist form to be used on a quarterly basis by BNI to assess their subcontractors records. The procedure did not provide adequate guidance to ensure the performance of any analysis to determine the recordability of injuries. For example, when BNI performed the quarterly subcontractor Injury/Illness recordkeeping of Chicago Bridge and Iron in late August 2005 they identified three recordkeeping discrepancies needing clarification:

- First Aid Log entry for an eye irritation on March 16, 2005;

- First Aid Log entry for an eye irritation on April 16, 2005; and
- First Aid Log entry for a back injury on July 12, 2005.

The resolution of the discrepancy was cited as “Responsible individual needs to provide justification regarding current injury classification.” There were no discussions of the attributes of the cases or a determination of the OSHA recordability of the cases. The assessor noted improved oversight by BNI of their subcontractors in the area of injury/illness recordkeeping. However, Finding A-05-ESQ-RPPWTP-002-F02 will remain open until BNI strengthens the analysis of recordability aspect of their oversight.

## **Items Opened**

Finding A-05-ESQ-RPPWTP-007-F01: Between March and September 2005 five injuries were not reported in accordance with OSHA requirements.

Based on OSHA requirements five cases were underreported:

- One case BNI reported as non-work related should have been reported as OSHA recordable;
- Two cases not reported as OSHA recordable should have been; and
- Two cases reported as OSHA recordable should have been reported as OSHA recordable with restricted workdays.

## **Items Closed**

Finding A-05-ESQ-RPPWTP-002-F01: BNI failed to record cases, work hours, and other data into the CAIRS database between January and March 2005.

Based on objective evidence including Corrective Action Report No. 24590-CAR-QA-05-029, “ORPS/CAIRS Administrator Failed to Report Data,” and a review of the CAIRS database, this Finding is closed. BNI’s Safety Assurance Manager assumed the duties of the CAIRS administrator and the missing information was entered into CAIRS upon discovery of the deficiency. ORP determined the corrective actions were effective.

## **Items Reviewed**

Finding A-05-ESQ-RPPWTP-007-F02: BNI Subcontractor Oversight issue was not corrected; Finding to remain open.

BNI’s oversight of major subcontractors was found to be ineffective during ORP’s March 2005 OSHA Injury/Illness Recordkeeping assessment. ORP documented the issue as Finding A-05-ESQ-RPPWTP-002-F02. BNI’s actions in response to this Finding included the performance of several surveillances in accordance with a new procedure,

“Assessment and Issue of Noncompliance for Construction Subcontractor’s Safety and Health Compliance,” effective August 22, 2005. The procedure falls short of ORP’s expectations because it does not assure adequate assessment of the appropriateness of categorization under 29 CFR 1904 by BNI on its subcontractors. In Section 3.3.2, Monitoring and Assessments, the procedure is silent on the performance of analysis for determining the recordability of injuries. As a result of BNI’s ineffective corrective action, ORP is unable to close Finding A-05-ESQ-RPPWTP-002-F02.

## INSPECTION NOTES

**Inspection Note Number:** A-05-ESQ-RPPWTP-007

**Inspectors Names(s):** Paul R. Hernandez

**Dates of Inspection:** September 26 through October 11, 2005

**Area/Item(s) Inspected: Occupational Safety and Health Act (OSHA)  
Injury/Illness Recordkeeping**

Every six months U.S. Department of Energy (DOE) field offices are required to review their contractor Injury/Illness recordkeeping processes to ensure adherence to OSHA reporting requirements. 29 CFR 1904 states, "The purpose of this rule is to require employers to record and report work-related fatalities, injuries and illnesses." The assessor reviewed the Injury/Illness recordkeeping requirements and the program and processes implemented by Bechtel National, Inc. (BNI). Employers must consider an injury or illness to meet the general recording criteria, and therefore to be recordable, if it results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness. BNI must also consider a case to meet the general recording criteria if it involves a significant injury or illness diagnosed by a physician or other licensed health care professional.

### **Observations and Assessments:**

The assessor reviewed the following documents related to the BNI Injury/Illness recordkeeping program:

- OSHA 29 CFR Part 1904 "Recording and Reporting Occupational Injuries and Illnesses;"
- OSHA 29 CFR Part 1910 "Occupational Safety and Health Standards for General Industry;"
- DOE O 440.1 "Worker Protection Management For DOE Federal And Contractor Employees;"
- DOE M 231.1-1A, "Environment, Safety And Health Reporting Manual," Revised September 9, 2004;
- OSHA Website: <http://www.osha.gov/recordkeeping/detailedfaq.html>, Detailed Frequently Asked Questions for OSHA's Injury and Illness Recordkeeping Rule;

- BNI procedure 24590-WTP-GPP-SIND-023, Revision 4, “Injury/Illness Notification, Investigation, and Reporting,” dated September 7, 2005;
- BNI procedure 24590-WTP-GPP-SIND-022, Revision 4, “Assessment and Issue of Noncompliance for Construction Subcontractor’s Safety and Health Compliance,” dated August 23, 2005;
- Safety Data Systems (SDS) First Aid Log, dated September 26, 2005;
- Patriot Fire Protection, “2005 OSHA Forms 300 and 300A,” printed September 28, 2005;
- Disposition of Recordability Form for J. Branson-Cox, dated August 17, 2005;
- DOE Form 5484.3, “Individual Accident/Incident Report” for Jill Branson Cox, case No. 1391-05, dated August 11, 2005;
- Statement of Employee, for Jill Branson Cox, dated August 10, 2005;
- General Instructions from Kadlec Medical Center – Emergency Department, for Jill Branson Cox, dated August 10, 2005;
- General Instructions from Kadlec Medical Center – Emergency Department, for Jill Branson Cox, dated August 20, 2005;
- Medical Record, ROV, from WorkCare for Wayne Callahan, dated April 13, 2005;
- BNI Statement of Employee for Wayne Callahan, dated (incorrectly) April 12, 2005;
- BNI Report of Accident/Incident for Wayne Callahan, dated April 13, 2005;
- Medical Record, ROV, from WorkCare for Wayne Callahan, dated April 14, 2005;
- Medical Record, Work Status Summary from WorkCare/Kennewick for Wayne Callahan, dated April 14, 2005;
- Letter, Jody Underwood of WorkCare to WA Department of Labor & Industries in support of L&I Claim No. Y931466, dated (incorrectly) March 29, 2005;
- Letter, Wayne Callahan to WA Department of Labor & Industries in support of L&I Claim No. Y931466, dated June 7, 2005;
- Notice of Decision from WA Department of Labor & Industries, to BNI, approving L&I Claim No. Y931466, dated June 23, 2005;

- SDS First Aid printout for Wayne Callahan, case No. 1277-05F, dated September 28, 2005;
- Medical Record, WTP Medical Status Update from WorkCare for Darby Bounxaysana, dated June 15, 2005;
- Medical Record, Return to Work instruction from Kania Clinic for Darby Bounxaysana, dated June 18, 2005;
- Medical Record, ROV from WorkCare for Darby Bounxaysana, dated June 20, 2005;
- SDS First Aid printout for Darby Bounxaysana, case No. 1332-05F/R, dated September 28, 2005;
- Labor & Industries Claim No. AC07175 for Rex Meyer, dated May 4, 2005;
- Letter, Jody Underwood of WorkCare to MS10-A Re: Rex Meyer, dated May 4, 2005;
- Medical File, Phone call ROV from WorkCare to Rex Meyer, dated May 16, 2005;
- Medical Record, Off Work Note from Benton Franklin Orthopedic Associates for Rex Meyer, dated June 13, 2005;
- Medical Record, Return to Work Note from Benton Franklin Orthopedic Associates for Rex Meyer, dated July 15, 2005;
- Letter, WA Department of Labor & Industries to BNI requesting information about Rex Meyer's Claim No. AC07175, dated June 7, 2005;
- Notice of Decision from WA Department of Labor & Industries, to BNI, approving Rex Meyer L&I Claim No. AC07175, dated June 30, 2005;
- SDS First Aid printout for Rex Meyer, case No. 1284-05F, dated September 28, 2005;
- Email, Paul Hernandez, DOE Office of River Protection (ORP) to Clay Davis, BNI, "Revision of CAR 05-036 Action Item 2", dated August 31, 2005;
- 24590-WTP-SQA-SA-05-004, Quarterly Subcontractor Injury/Illness Recordkeeping Assessment Worksheet, Intermec, dated September 21, 2005;
- 24590-WTP-SQA-SA-05-005, Quarterly Subcontractor Injury/Illness Recordkeeping Assessment Worksheet, Central PreMix, dated September 29, 2005;



- 24590-WTP-SQA-SA-05-006, Quarterly Subcontractor Injury/Illness Recordkeeping Assessment Worksheet, CB&I, dated August 30, 2005;
- 24590-WTP-SQA-SA-05-007, Quarterly Subcontractor Injury/Illness Recordkeeping Assessment Worksheet, FD Thomas, dated September 1, 2005;
- 24590-WTP-SQA-SA-05-00/, Quarterly Subcontractor Injury/Illness Recordkeeping Assessment Worksheet, Patriot Fire Protection, dated September 1, 2005;

**Discussion:**

The assessor examined relevant documentation including the revised BNI procedure for implementation of the OSHA Recordkeeping Program. The assessor performed evaluations of employee medical records, contractor case files, Computerized Accident/Incident Reporting System (CAIRS) database entries, and “Safety Data System (SDS) First Aid Log” data. The assessor interviewed BNI’s Workers Compensation Administrator and reviewed current Labor and Industries records for employees who had filed claims. The assessor interviewed four BNI employees who sustained injuries between March and September 2005.

**Review of Procedures**

DOE’s review of the contractor’s procedure for the OSHA Recordkeeping Program determined there was a clear delineation of responsibilities between the employees, supervisors, safety group, project medical staff, and the CAIRS Coordinator. There was a clear process described for reporting injuries for CAIRS and OSHA recordkeeping purposes. BNI procedure 24590-WTP-GPP-SIND-023, Revision 4, Injury/Illness Notification, Investigation, and Reporting,” dated September 7, 2005 was determined to be in accordance with the DOE Environmental, Safety and Health Reporting Manual, DOE M 231.1-1A. Revision 2 was in effect during the spring 2005 OSHA Recordkeeping Program assessment by ORP. Revisions 3 and 4 strengthened the procedure by requiring corrective actions to be entered into the Recommendation Information Tracking System, detailing the responsibilities of supervision to address the causes of injuries and illnesses, and clarifying the role of Safety Assurance in the development and implementation of corrective actions.

As a result of DOE’s 2004 recordkeeping reviews BNI created a Disposition of Recordability (DOR) form. This form was used to describe injury/illness events and provide justification for cases where BNI has determined an event is not recordable for OSHA purposes. The information supplements the medical files and provides adequate information to give the reviewer an understanding of why a case would not be classified as first aid, recordable, restricted, or occupational/work-related. The documentation indicated the BNI safety organization had performed an analysis of the cases to determine

OSHA recordability. However, as discussed below, DORs were not issued for all cases where BNI determined the injury was not OSHA recordable.

BNI procedure 24590-WTP-GPP-SIND-022, Revision 4, "Assessment and Issue of Noncompliance for Construction Subcontractor's Safety and Health Compliance," partially addressed weaknesses in BNI's oversight of subcontractors. The procedure was not effective in assuring adequate assessment of the appropriateness of categorization of subcontractor injuries. (see section titled Review of Subcontractor OSHA Recordkeeping)

### **Comparison of CAIRS Data to Medical Files**

The ORP assessor had access to the CAIRS production database for BNI and subcontractors. The information from March through October 2005 was accessed and evaluated. The ORP reviewer analyzed all cases posted in CAIRS that indicated an OSHA recordable injury including restricted or lost work days. Using the assigned case numbers from the log, the reviewer accessed the applicable DOE Form 5484.3, "Individual Accident/Incident Reports," for each case. The contents of the 5484.3 forms were then compared to the information in the patient's medical file.

ORP reviewed case files maintained in the Waste Treatment and Immobilization Plant (WTP) onsite first aid clinic, managed by WorkCare. Review of these files for the March through October 2005 time period, found that if formal restrictions were imposed there was a form, "WTP Medical Status Update," in the file. The forms contained sections for listing formal restrictions, date of restriction, duration, and end date, as well as a section describing the work available for the restricted employee. The forms were signed by the employee, their supervisor, and the safety representative. Employees have been instructed that unless the restriction assessment is completed and signed, there were no work restrictions; thus eliminating uncertainties.

ORP found one case BNI reported as non-work related should have been reported as OSHA recordable.

- Case No. 1391-05, August 10, 2005: Office employee reported for work at 7:00 a.m. At 7:10 a.m. employee attempted to use her scissors to punch a new hole in her belt because it was fitting loosely. Employee unbuckled the belt and then placed the opened scissors between her belly and the belt holding the scissors in her left hand and the belt in the right. She shoved forward with the scissors to punch the hole and lacerated her right index finger. The employee was transported to Kadlec Emergency Room. It was determined the injury required medical treatment of three sutures (stitches) and prescription medication.

BNI investigated the injury and documented their findings on a DOR Form, dated August 17, 2005. BNI concluded the injury was non-recordable, stating that OSHA 1904.5(b)(2)(vi) does not require employers to record an injury if the injury is solely the result of personal grooming. ORP consulted with OSHA's Bellevue, Washington,

office recordkeeping Subject Matter Expert and determined BNI was in error with respect to personal grooming. The case is OSHA recordable with medical treatment beyond first aid.

In addition the OSHA Website:

<http://www.osha.gov/recordkeeping/detailedfaq.html>, provided detailed Frequently Asked Questions for OSHA's Injury and Illness Recordkeeping Rule.

*Question 5-3.* What activities are considered “personal grooming” for purposes of the exception to the geographic presumption of work-relatedness in section 1904.5(b)(2)(vi)?

Personal grooming activities are activities directly related to personal hygiene, such as combing and drying hair, brushing teeth, clipping fingernails and the like. Bathing or showering at the workplace when necessary because of an exposure to a substance at work is not within the personal grooming exception in Section 1904.5(b)(2)(vi). Thus, if an employee slips and falls while showering at work to remove a contaminant to which he has been exposed at work, and sustains an injury that meets one of the general recording criteria listed in Section 1904.7(b)(1), the case is recordable. (ORP interviewed the employee.)

ORP found two cases where cases recorded as OSHA recordable should have been reported as OSHA recordable with restricted workdays.

- Case No. 1238-05, March 23, 2005: Employee (ironworker) was lifting a 25 foot piece of #11 rebar from a horizontal position and installing it vertically into wall 1118C. As he was lifting the rebar it became caught on rebar already installed on the wall. The ironworker was holding the rebar in his right hand and he pulled to free the rebar. As it came free it pinched his right hand between two pieces of #11 rebar resulting in a contusion and fracture to the right thumb. On March 28, 2005, the employee’s personal care physician initiated work restrictions through April 23, 2005. On April 26, 2005, four more weeks were added to the restriction. The employee was laid off on May 3, 2005. The number of restricted workdays should have been at least 33. BNI Safety agreed with ORP on this issue and planned to revise the CAIRS database; and
- Case No. 1332-05, June 7, 2005: Employee (apprentice ironworker) was working under a rebar mat spreading rebar with a porta power jack. As the rebar was raised into position the jaw of the machine let loose and struck her in the head. She crawled out from under the rebar with the help of the journeymen ironworkers and was transported to the WorkCare WTP First Aid Clinic. That night employee was still hurting and throwing up. On the morning of June 8, 2005, she went to the Lourdes Hospital Emergency Room and was diagnosed with a concussion. She was issued prescription pain medication to address severe headache pain, had two CAT scans and ultimately required the services of a neurologist. On June 15, 2005, she was issued formal work restrictions through June 20, 2005. The restrictions were in the

patient's medical file on a WTP Medical Status Update form, complete with required signatures. The restrictions instructed her not to climb, and not to enter restricted areas such as inside rebar mats. BNI considered this case OSHA recordable, but failed to enter the restricted work days. (ORP interviewed the employee.)

### **Comparison of Labor and Industries Data to CAIRS Data**

The ORP assessor initiated this review using Labor and Industries (L&I) data from BNI's Worker's Compensation Administrator. ORP focused on cases compensated by L&I which the contractor has not reported as OSHA recordable. In theory, all L&I cases are not OSHA recordable, and all OSHA recordable cases are not compensable. However, OSHA will often review L&I records because there is an overlap. It is a possibility that cases in which the state is compensating individuals for injuries would be work related, and would likely involve medical treatment beyond first aid. (This is not always true. In some cases, for instance, L&I may pay medical costs to a health care provider for x-rays, to determine if an employee fractured a bone. If the x-ray is negative, and no medical treatment beyond first aid is administered, the injury would not be considered OSHA recordable.)

The ORP assessor had access to the CAIRS production database for BNI and subcontractors. The information from March through October 2005 was accessed and compared to the L&I records for the same period. The ORP reviewer analyzed all cases in the L&I records and compared to the information in the patient's medical file.

The assessor found two cases not reported as OSHA recordable, which should have been. No DORs were issued by BNI.

- SDS Case No. 1430, April 13, 2005: At 8:30 a.m. the employee (ironworker) was leaning on his left elbow welding. As he finished he changed position and felt a pop at the point of the elbow. He began having pain and swelling, then later that day sought medical attention at the WorkCare WTP First Aid Clinic. The left elbow had developed swelling and was warm to the touch. He was assessed as having left elbow contusion, effusion, cellulitis, and traumatic bursitis. He was given warm packs, prescribed the antibiotic Keflex and instructed to minimize use of his left elbow. The following morning he returned to the WTP First Aid Clinic and was sent to WorkCare's Kennewick Office. He was diagnosed with bursitis olecranon, traumatic bursitis, and cellulitis. He was instructed to continue taking antibiotics and issued a work restriction to avoid direct pressure on the left elbow. He initiated an L&I claim which the state initially rejected. On June 7, 2005, he protested the L&I determination and wrote a letter stating the condition was not preexisting and that he had not had any problems with his elbow in the past 25 years. He further explained that the injury was sudden, of a traumatic nature, and produced an immediate result. ORP has determined that this case is OSHA recordable due to the prescription medications administered. Furthermore, the medical file shows restrictions were issued on April 14, 2005. (ORP interviewed the employee.); and

- SDS Case No. 2240, April 20, 2005: Night-shift employee (labor foremen) was working on a concrete pour at the High-Level Waste when he climbed through rebar to exit the area. He twisted his knee and heard a pop when he miss-stepped onto grillage. He reported the incident to supervision and was transported to the WorkCare First Aid Clinic. He had pain and tenderness to the area of medial condyle inferior and lateral to patella. The knee was treated with ice for 20 minutes and the worker refused the offer of nonsteroidal anti-inflammatory drugs (NSAIDS). He returned for another ice treatment later in the shift. The next night (April 21, 2005) he returned to the WTP First Aid Clinic complaining of knee stiffness and swelling. He was treated with ice and 400 mg of motrin, and advised to return for another treatment during that shift. The next night (April 22, 2005) he returned to the WTP First Aid Clinic complaining of knee stiffness and swelling. He was treated with ice and 200 mg of motrin, and advised to return after the weekend.

On Monday, April 25, 2005, he returned to the WTP First Aid Clinic stating he felt improved but complaining of tenderness which may be attributed to his weekend activities. He was found to have a slight non pitting edema (swelling – accumulation of excess fluid) to the region inferior to the left patella. He was advised to use heat or ice and NSAIDS as needed.

On April 26, 2005, he returned to the WTP First Aid Clinic twice, complaining of stiffness to his left knee with tenderness during twisting motions. He was advised to use heat or ice and NSAIDS as needed.

On April 27, 2005, he returned to the WTP First Aid Clinic stating he felt improved but complaining of a slight tenderness after performing increased ambulation the previous day. He was given 400 mg motrin.

On April 29, 2005, he returned to the WTP First Aid Clinic stating he felt improved but complaining of a slight tenderness after climbing stairs. He was given 400 mg motrin.

At 2:30 a.m. on May 4, 2005, he ambulated into the WTP First Aid Clinic stating he felt improved and was on the mend, according to the medical file notes. (However, during an interview with ORP the employee contradicted this, stating that he was still in pain after a couple of weeks. He thought the pain should have been going away.)

At 11:00 a.m. on May 4, 2005, the employee phoned the WTP First Aid Clinic stating he had reinjured his knee at home while leaning over to put on his shoe. He was unable to stand and was instructed to seek appropriate medical care. He reported to the emergency room and was diagnosed with torn cartilage. After consulting a surgeon, x-rays and MRI indicated torn cartilage and torn patella. He was scheduled for surgery the next day.

On May 5, 2005, surgery was performed and employee was instructed by his personal physician to remain off work until June 13, 2005. On June 13, 2005, he was issued a return to work instruction with the restriction “as tolerated” issued by his personal physician. On July 15, 2005, he was issued a return to full duty work release.

This case should have been an OSHA recordable with restricted and lost workdays since the initiating event can be attributed to the twisted knee injury sustained on April 20, 2005. ORP reached this conclusion based upon 1904.5 (a), “You must consider an injury or illness to be work-related if an event or exposure in the work environment either caused or contributed to the resulting condition.” In addition 1904.5 (b)(3) states, “How do I handle a case if it is not obvious whether the precipitating event or exposure occurred in the work environment or occurred away from work?” In these situations, you must evaluate the employee’s work duties and environment to decide whether or not one or more events or exposures in the work environment either caused or contributed to the resulting condition...” Furthermore, would the knee have blown out at home unless the employee had sustained the prior knee injury on April 20, 2005? (ORP interviewed the employee.)

### **Review of Subcontractor OSHA Recordkeeping**

BNI’s oversight of major subcontractors was found to weak during the March 2005 ORP assessment. There was a lack of documented evidence that BNI had performed oversight on WTP subcontractors. Desired oversight included comparison of OSHA 300 and first aid logs with injuries reported to BNI, and assessment of the appropriateness of categorization under 29 CFR 1904. The issue was documented as Finding A-05-ESQ-RPPWTP-002-F02.

BNI’s actions in response to this Finding included the performance of several surveillances in accordance with a new procedure, “Assessment and Issue of Noncompliance for Construction Subcontractor’s Safety and Health Compliance,” effective August 22, 2005. The procedure falls short of ORP’s expectations because it does not assure adequate assessment of the appropriateness of categorization under 29 CFR 1904 by BNI on its subcontractors. In Section 3.3.2, Monitoring and Assessments, the procedure is silent on the performance of analysis for the recordability of injuries. Appendix C of the procedure is a one-page checklist form to be used on a quarterly basis by BNI to assess their subcontractors records. The form does not contain enough space to adequately analyze specific cases. For example, when BNI performed the quarterly subcontractor Injury/Illness recordkeeping of Chicago Bridge and Iron in late August 2005 they identified three recordkeeping discrepancies needing clarification:

- First Aid Log entry for an eye irritation on March 16, 2005;
- First Aid Log entry for an eye irritation on April 16, 2005; and
- First Aid Log entry for a back injury on July 12, 2005.

The resolution of the discrepancy was cited as “Responsible individual needs to provide justification regarding current injury classification.” There were no discussions of the attributes of the cases or a determination of the OSHA recordability of the cases. The Finding will remain open until BNI strengthens the analysis of recordability aspect of their oversight.

**Conclusions:**

The assessor concluded that BNI and subcontractors have developed and implemented procedures adequate for injury/illness recordkeeping as required by OSHA 29 CFR Part 1904, Recording and Reporting Occupational Injuries and Illnesses. Medical files located at the WTP onsite first aid clinic containing injury and illness records were complete and well-maintained. Five instances of underreporting in terms of OSHA recordability requirements were found during this assessment. This issue has been documented as Finding A-05-ESQ-RPPWTP-007-F01.

BNI continues to exhibit weakness in the area of subcontractor oversight for OSHA recordkeeping. BNI could not produce documented evidence that they performed assessment of the appropriateness of categorization under 29 CFR 1904. This issue has been documented as Finding A-05-ESQ-RPPWTP-007-F02. Corrective actions from March 2005 in this area were unacceptable.

BNI has not created safety analysis files for individual cases. A safety analysis file, although not required, would be useful in compiling the complete story on cases.

DOE ORP will assess contractor implementation of OSHA 29 CFR 1904 on a semi-annual basis.

**Submitted by:** \_\_\_\_\_ **Approved by:** \_\_\_\_\_  
**Date:** \_\_\_\_\_ **Date:** \_\_\_\_\_