



Department of Energy
Washington, DC 20585

July 8, 2014

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Dennis Carr
Program Manager
Fluor-B&W Portsmouth, LLC
P.O. Box 548
3930 U.S. Route 23 South
Piketon, Ohio 45661

WEA-2014-02

Dear Mr. Carr:

This letter refers to the Department of Energy's (DOE) investigation into the facts and circumstances associated with the tip-over of a 60-ton hydraulic crane on October 9, 2012. The results of the investigation were provided to Fluor-B&W Portsmouth, LLC (FBP) in an investigation report dated October 28, 2013. DOE convened an enforcement conference on January 23, 2014, with you and members of your staff to discuss the report's findings and FBP's corrective action plan. A summary of the conference and list of attendees is enclosed.

DOE considers the potential for loss of life and/or serious injuries associated with crane operation and the associated violations to be of high safety significance. The tip-over could have resulted in at least one fatality. DOE's evaluation of the circumstances concluded that FBP did not effectively communicate work control program requirements to workers to ensure the performance of work activities in a safe and healthful manner.

Based on an evaluation of the evidence in this matter, DOE has concluded that violations of 10 C.F.R. Part 851, *Worker Safety and Health Program*, by FBP have occurred. Accordingly, DOE is issuing the enclosed Preliminary Notice of Violation (PNOV), which cites two Severity Level I violations and one Severity Level II violation. DOE imposed a \$150,000 contract fee reduction on FBP for a negative safety performance trend during fiscal year (FY) 2012 and continuing into FY 2013 that incorporated the crane tip-over event. Therefore, in accordance with 10 C.F.R. § 851.5, *Enforcement*, subsection (c), DOE proposes no civil penalty for the violations cited in this PNOV.

DOE acknowledges FBP's initial response to the event and subsequent corrective actions to address the potential violations and prevent their



recurrence. DOE has concluded that FBP's corrective action plan appears to address the violations cited in this PNOV in order to prevent recurrence. DOE further recognizes FBP's substantial progress in implementing a broad, steady, long-term effort to address the legacy safety culture issues.

Pursuant to 10 C.F.R. § 851.42, *Preliminary Notice of Violation*, you are obligated to submit a written reply within 30 calendar days of receipt of the enclosed PNOV, and to follow the instructions specified in the PNOV when preparing your response. If no reply is submitted within 30 days, in accordance with 10 C.F.R. § 851.42(d), you relinquish any right to appeal any matter in the PNOV and the PNOV will constitute a final order.

After reviewing your response to the PNOV, including any proposed additional corrective actions entered into DOE's Noncompliance Tracking System, DOE will determine whether further action is necessary to ensure compliance with worker safety and health requirements. DOE will continue to monitor the completion of corrective actions until these matters are fully resolved.

Sincerely,



Steven C. Simonson

Director

Office of Enforcement

Office of Independent Enterprise Assessments

Enclosures: Preliminary Notice of Violation (WEA-2014-02)
Enforcement Conference Summary and List of Attendees

cc: William Murphie, PPPO
Douglas Fogel, Fluor-B&W

Preliminary Notice of Violation

Fluor-B&W Portsmouth, LLC
Portsmouth Gaseous Diffusion Plant

WEA-2014-02

A U.S. Department of Energy (DOE) investigation into the facts and circumstances associated with the tip-over of a 60-ton hydraulic crane on October 9, 2012, identified multiple violations of DOE worker safety and health requirements by Fluor-B&W Portsmouth, LLC (FBP). The violations involved deficiencies in hazard identification, assessment, prevention, and abatement; training and information; and crane operational safety.

DOE has grouped and categorized the violations as two Severity Level I violations and one Severity Level II violation. As explained in 10 C.F.R. Part 851, Appendix B, *General Statement of Enforcement Policy*, § VI(b)(1), “[a] Severity Level I violation is a serious violation. A serious violation shall be deemed to exist in a place of employment if there is a potential that death or serious physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use, in such place of employment.” Section VI(b)(2) states, “[a] Severity Level II violation is an other-than-serious violation. An other-than-serious violation occurs where the most serious injury or illness that would potentially result from a hazardous condition cannot reasonably be predicted to cause death or serious physical harm to employees but does have a direct relationship to their safety and health.”

Pursuant to 10 C.F.R. § 851.5(b) and the Conditional Payment of Fee clause under contract number DE-AC30-010CC40017 between DOE and FBP, the Portsmouth/Paducah Project Office administered a contract fee reduction in the amount of \$150,000 for a negative safety performance trend that included the subject event. As a result, and in accordance with 10 C.F.R. § 851.5(c), DOE proposes no civil penalty for the violations identified in this preliminary notice of violation (PNOV).

As required by 10 C.F.R. § 851.42(b) and consistent with Part 851, Appendix B, the violations are listed below. If this PNOV becomes a final order, then FBP may be required to post a copy of this PNOV in accordance with 10 C.F.R. § 851.42(e).

I. VIOLATIONS

A. Hazard Identification, Assessment, Prevention, and Abatement

Title 10 C.F.R. § 851.10, *General requirements*, at subsection (a), states that “[w]ith respect to a covered workplace for which a contractor is responsible, the contractor must: ...

(2) [e]nsure that work is performed in accordance with: (i) [a]ll applicable requirements of [10 C.F.R. Part 851]; and (ii) [w]ith the worker safety and health program for that workplace.”

Title 10 C.F.R. § 851.21, *Hazard identification and assessment*, at subsection (a), states that “[c]ontractors must establish procedures to identify existing and potential workplace hazards and assess the risk of associated worker injury and illness. Procedures must include methods to: (1) [a]ssess worker exposure to chemical, physical, biological, or safety workplace hazards through appropriate workplace monitoring; (2) [d]ocument assessment for chemical, physical, biological, and safety workplace hazards using recognized exposure assessment and testing methodologies and using of accredited and certified laboratories;... (5) [e]valuate operations, procedures, and facilities to identify workplace hazards; [and] (6) [p]erform routine job activity-level hazard analyses.”

Title 10 C.F.R. § 851.21 at subsection (c) states that “[c]ontractors must perform [the activities identified in 10 C.F.R. § 851.21(a)] initially to obtain baseline information and as often thereafter as necessary to ensure compliance with the requirements of [10 C.F.R. Part 851, subpart C].”

Title 10 C.F.R. § 851.22, *Hazard prevention and abatement*, at subsection (a), states that “[c]ontractors must establish and implement a hazard prevention and abatement process to ensure that all identified and potential hazards are prevented or abated in a timely manner.” This subsection also requires that “(1) [f]or hazards identified ... during the development of procedures, controls must be incorporated in the appropriate ... procedure” and “(2) [f]or existing hazards identified in the workplace, contractors must: ... (iii) [p]rotect workers from dangerous safety and health conditions.”

Title 10 C.F.R. § 851.22 at subsection (b) provides that “[c]ontractors must select hazard controls based on the following hierarchy: (1) [e]limination or substitution of the hazards where feasible and appropriate; (2) [e]ngineering controls where feasible and appropriate; (3) [w]ork practices and administrative controls that limit worker exposures; and (4) [p]ersonal protective equipment.”

Contrary to these requirements, FBP failed to effectively implement a work planning and control process that identified, assessed, and abated workplace hazards consistent with the applicable requirements and procedures invoked by the approved FBP 10 C.F.R. Part 851 worker safety and health (WSH) program described in FBP-05-PL-00002, *LATA/Parallax Portsmouth (LPP) Worker Safety and Health Plan* (revision 6, dated May 12, 2010). Specific examples are listed below:

1. FBP did not effectively implement the work control processes described in FBP-NSE-PRO-00070 (revision 4, dated August 23, 2012), *Work Planning and Control Process*, and the management approval processes as described in the Long-Term Order (LTO) associated with surveillance and maintenance (S&M) and decontamination and decommissioning (D&D) LTO-S&M/D&D-11-03 (revision 1, dated January 19, 2011).

2. FBP did not ensure that work was clearly defined and executed and that the hazards were analyzed. FBP did not recognize that the activity associated with the inspection of the crane wire rope and drum connection constituted work that must be planned and executed in accordance with FBP-NSE-PRO-00070. In addition, FBP did not prevent a crane operator from using the crane without a work package/job hazards analysis and did not ensure that management approved the use of the crane before work began.

Collectively, these noncompliances constitute a Severity Level I violation.

B. Training and Information

Title 10 C.F.R. § 851.25, *Training and information*, at subsection (a), requires that “[c]ontractors must develop and implement a worker safety and health training and information program to ensure that all workers exposed or potentially exposed to hazards are provided with the training and information on that hazard in order to perform their duties in a safe and healthful manner.”

Title 10 C.F.R. § 851.25 at subsection (c), states that “[c]ontractors must provide training and information to workers who have worker safety and health program responsibilities that are necessary for them to carry out those responsibilities.”

Contrary to these requirements, FBP failed to effectively implement a training program that provided workers with safety and health information necessary to carry out their responsibilities and duties in a safe and healthful manner. FBP did not provide the workers information on revisions to the LATA/Parallax Portsmouth (LPP) WSH program and invoked documents. Additionally, FBP did not train workers on the Long-Term Order that requires workers to obtain approval for work responsibilities involving hoisting and rigging activities. Specific examples are listed below:

1. FBP did not effectively communicate to all workers the most recent revisions to the scope and rigor of the work control process to ensure that they fully understood the requirements described in FBP-NSE PRO-00070. According to the Training Program Plan, initial training consists of classroom instruction, computer-based and on-the-job training. The content of the training included an understanding of the fundamentals, basic principles, systems, procedures, and emergency responses involved in an employee’s work assignments. Employee interviews indicated that the initial training on the revised FBP-NSE PRO-00070 was limited to FBP supervisors. As a result, the non-supervisory workers inspecting the crane wire rope and drum were not familiar with the work planning and control process, and did not recognize that the activity should have been performed in accordance with the work planning and control process.
2. FBP did not effectively communicate to hoisting and rigging workers the directions, instructions, and information in the Long-Term Order when using hoisting and rigging equipment. As a result, FBP workers did not recognize that the hoisting and rigging manager must approve the use of all hoisting and rigging equipment in accordance with

the hoisting and rigging work approval process, before beginning inspection activity on the crane.

Collectively, these noncompliances constitute a Severity Level II violation.

C. Crane Operational Safety

Title 10 C.F.R. § 851.23, *Safety and health standards*, at subsection (a), states that “[c]ontractors must comply with the following safety and health standards that are applicable to the hazards at their covered workplace: (3) Title 29 C.F.R. Part 1910, “Occupational Safety and Health Standards,” excluding 29 C.F.R. 1910.1096, “Ionizing Radiation.”

Title 29 C.F.R. § 1910.180, *Crawler, locomotive and truck cranes*, subsection (h), *Handling the load*, at subparagraph (1)(i), states that “[n]o crane shall be loaded beyond the rated load, except for test purposes as provided in [29 C.F.R. § 1910.180(e)]. Subparagraph (3)(ix), states that “[o]utriggers shall be used when the load to be handled at that particular radius exceeds the rated load without riggers as given by the manufacturer for that crane.”

Contrary to these requirements, FBP failed to operate the 60-ton mobile crane within the rated lifting capacities described in the crane manufacturer’s rating manual during the work evolution associated with the inspection of the wire rope and drum connection. The manual states that the crane lifting capacity when operated on tires shall not exceed 75 percent of the tipping load. The manual also states that the rated lifting capacities must include the weight of the hook block (estimated to be 977 pounds). The crane boom was extended 100 feet at an angle of approximately 40 degrees when the crane tipped forward. This configuration is not permitted by the manufacturer when the crane is operated on tires over the front without the use of outriggers.

This noncompliance constitutes a Severity Level I violation.

II. REPLY

Pursuant to 10 C.F.R. § 851.42(b)(4), FBP is hereby obligated, within 30 calendar days of receipt of this PNOV, to submit a written reply. The reply should be clearly marked as a “Reply to the Preliminary Notice of Violation.”

If FBP chooses not to contest the violations set forth in this PNOV, the reply should clearly state that FBP waives the right to contest any aspect of this PNOV. In such cases, this PNOV will constitute a final order upon the filing of the reply.

If FBP disagrees with any aspect of this PNOV, then as applicable and in accordance with 10 C.F.R. § 851.42(c)(1), the reply must: (1) state any facts, explanations, and arguments that support a denial of an alleged violation; and (2) discuss the relevant authorities that support the position asserted, including rulings, regulations, interpretations, and previous decisions issued by DOE. In addition, 10 C.F.R. § 851.42(c)(2) requires that the reply include copies of all relevant documents.

Please send the appropriate reply by overnight carrier to the following address:

Director, Office of Enforcement
Attention: Office of the Docketing Clerk
U.S. Department of Energy
19901 Germantown Road
Germantown, MD 20874-1290

A copy of the reply should also be sent to the Manager of the Portsmouth/Paducah Project Office.

Pursuant to 10 C.F.R. § 851.42(d), if FBP does not submit a written reply within 30 calendar days of receipt of this PNOV, FBP relinquishes any right to appeal any matter in this PNOV, and this PNOV, including the proposed remedy, will constitute a final order.

III. CORRECTIVE ACTIONS

Corrective actions that have been or will be taken to avoid further violations should be delineated, with target and completion dates, in DOE's Noncompliance Tracking System.



Steven C. Simonson

Director
Office of Enforcement
Office of Independent Enterprise Assessments

Washington, DC
This 8th day of July 2014