



Department of Energy

Washington, DC 20585

August 29, 2013

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Dr. Doon Gibbs
President
Brookhaven Science Associates, LLC
Brookhaven National Laboratory
40 Brookhaven Avenue
Upton, New York 11973-5000

WEA-2013-01

Dear Dr. Gibbs:

This letter refers to the Office of Health, Safety and Security's Office of Enforcement and Oversight investigation into the facts and circumstances associated with a fall injury event that occurred on November 29, 2011, while workers were torch-cutting the steel walls of the decommissioned Brookhaven Graphite Research Reactor in building 701 at the Brookhaven National Laboratory. The results of the U.S. Department of Energy (DOE) investigation were provided to Brookhaven Science Associates, LLC (BSA) in an investigation report dated November 28, 2012. DOE convened an enforcement conference on March 14, 2013, with you and members of your staff to discuss the report's findings and the BSA corrective action plan. A summary of the conference and list of attendees is enclosed.

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 BSA have occurred. Accordingly, DOE is issuing the enclosed Preliminary Notice of Violation (PNOV), which cites one Severity Level I violation and one Severity Level II violation. DOE administered a contract fee reduction in the amount of \$959,595 pursuant to the Conditional Payment of Fee clause under contract number DE-AC02-98CH10886 between DOE and BSA for unacceptable safety performance associated with a series of incidents and near misses. The cited incidents included the event described in this PNOV, which resulted in serious injuries. Therefore, in accordance with 10 C.F.R. § 851.5(c), DOE proposes no civil penalty for the violations identified in this PNOV.

DOE considers the serious injuries sustained by the worker and the associated violations to be of high safety significance. The worker's fall from approximately 16 feet, which occurred when a section of the scissor lift platform guardrail collapsed, resulted in multiple bone fractures and an extended recovery time but could easily have resulted in a fatality. DOE's evaluation of the circumstances concluded that BSA did not apply rigor and formality to work planning, control, execution, and oversight at a level commensurate with the hazards and risks associated with the scope of work. BSA did not clearly communicate to workers the expectation that safety must be



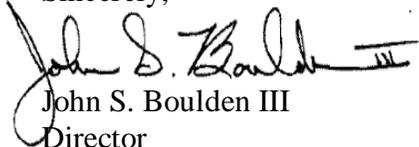
an integral part of planning and work scope execution. The tailgate safety meeting held on November 29, 2011, before the fall injury event did not focus on the hazards and associated controls for the upcoming work. Furthermore, BSA did not adequately define and communicate work assignments to ensure that workers understood their responsibilities associated with the operation and inspection of the aerial lift used during the work.

Notwithstanding these issues, DOE acknowledges BSA's initial response to the event and subsequent corrective actions to address the potential violations and prevent their recurrence. DOE has concluded that BSA's corrective action plan appears to address the deficiencies identified in the joint BSA/DOE accident investigation team report dated December 22, 2011, and the violations within this PNOV. DOE recognizes BSA's substantial progress in strengthening processes for identifying and controlling hazards and for reviewing and revising institutional procedures related to work planning and control, work oversight, aerial lift safety and training, and pre-job briefings to ensure that workers are properly equipped to meet BSA work performance expectations.

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,



John S. Boulden III

Director

Office of Enforcement and Oversight

Office of Health, Safety and Security

Enclosures: Preliminary Notice of Violation
Enforcement Conference Summary and List of Attendees

cc: Frank Crescenzo, BHSO
Charles Dimino, BSA

Preliminary Notice of Violation

Brookhaven Science Associates, LLC
Brookhaven National Laboratory

WEA-2013-01

A U.S. Department of Energy (DOE) investigation into the facts and circumstances associated with the fall injury event that occurred on November 29, 2011, during decontamination and decommissioning of the Brookhaven Graphite Research Reactor (BGRR) located in building 701 at the Brookhaven National Laboratory (BNL), identified multiple violations of DOE worker safety and health requirements by Brookhaven Science Associates, LLC (BSA). The violations involved deficiencies in hazard identification, assessment, prevention, and abatement, as well as deficiencies in training and information.

DOE has grouped and categorized the violations as one Severity Level I violation 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-AC02-98CH10886 between DOE and BSA, the Brookhaven Site Office administered a contract fee reduction in the amount of \$959,595 for an unacceptably high rate of serious safety and health incidents and near misses, including the fall injury at the BGRR. 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 BSA will 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 paragraph (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 paragraph (a), states that “[c]ontractors must establish procedures to identify existing and potential workplace hazards and assess the risk of associated workers 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....” In accordance with paragraph (c) of the same section, “[c]ontractors must perform [these activities] 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 paragraph (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 paragraph 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.”

Contrary to these requirements, BSA failed to establish and 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 BNL 10 C.F.R. Part 851 worker safety and health program entitled *BNL Worker Safety and Health Program Description*, dated August 9, 2011. Specific examples include the following:

1. BSA did not provide workers with instructions in Work Procedure (WP) No. 314-29, *Removal of Bioshield Steel and Concrete*, on methods for executing the steps associated with removing sections of wall and ceiling steel in the BGRR. BSA did not identify or discuss with workers the potential hazards associated with handling and securing sections of steel during torch cutting operations and the types of controls required to eliminate the hazards and allow workers to safely perform step No. 4.4[2], *Biological Shield Removal*, of the work procedure while operating from the SkyJack SJ III 3226 scissor lift.
2. BSA did not document in the job safety analysis associated with WP No. 314-29 the operating procedures described in the Skyjack Operating Manual (dated February 2004) for the SkyJack SJ III 3226 scissor lift. The manual instructs workers to lock all guardrails in their upright position with locking pins before operating the aerial platform.
3. BSA did not conduct an effective pre-use or pre-start inspection of the scissor lift in accordance with Standards-Based Management System Subject Area document *Use of*

Aerial Lifts and Facilities & Operations (F&O) procedure *Aerial Lift Safety* to ensure that operators properly installed aerial lift guardrails before use and during each use.

4. BSA did not perform an annual inspection of the SkyJack SJ III 3226 scissor lift within 13 months of the lift's previous annual inspection date of September 21, 2010, as required by F&O procedure *Aerial Lift Safety*.
5. BSA did not apply a yellow tag to the SkyJack SJ III 3226 scissor lift, indicating an expired inspection, and remove the equipment from service in accordance with F&O procedure *Aerial Lift Safety*.

Collectively, these noncompliances constitute a Severity Level I violation.

B. Training and Information

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

Title 10 C.F.R. § 851.23, *Safety and health standards*, subparagraph (a)(7), requires contractors to comply with 29 C.F.R. Part 1926, *Safety and Health Regulations for Construction*.

Title 29 C.F.R. § 1926.21(b), *Employer responsibility*, at subparagraph (2), states that “[t]he employer shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.”

Contrary to these requirements, BSA failed to meet the provisions of the Environmental Restoration Projects Operations Procedures Manual 3.2 (ERP-OPM -3.2), *Work Planning, Control and Implementation* document (revision 14, effective date August 30, 2011) that require a detailed discussion of planned work during tailgate safety meetings. For example, during the tailgate safety meeting held on November 29, 2011, BSA did not discuss with workers their roles and responsibilities and the inspection and operational requirements specific to the SkyJack SJ III 3226 scissor lift, including provisions contained in the operator's manual to perform scissor lift pre-use or pre-start inspection. These provisions require the scissor lift guardrails to be in an upright position and properly locked with locking pins.

This noncompliance constitutes a Severity Level II violation.

II. REPLY

Pursuant to 10 C.F.R. § 851.42(b)(4), BSA 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 BSA chooses not to contest the violations set forth in this PNOV, the reply should clearly state that BSA 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 BSA 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:

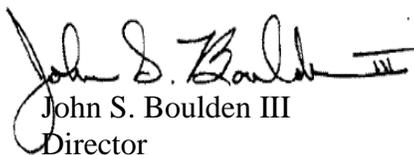
Director, Office of Enforcement and Oversight
Attention: Office of the Docketing Clerk
U.S. Department of Energy
19901 Germantown Road
Germantown, MD 20874-1290

A copy of the reply should also be sent to the Manager of the Brookhaven Site Office.

Pursuant to 10 C.F.R. § 851.42(d), if BSA does not submit a written reply within 30 calendar days of receipt of this PNOV, BSA relinquishes any right to appeal any matter in this PNOV, and this PNOV 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.



John S. Boulden III
Director

Office of Enforcement and Oversight
Office of Health, Safety and Security

Washington, DC
This 29th day of August 2013