

## **Department of Energy**

Washington, DC 20585

June 10, 2022

Dr. Thomas Mason Laboratory Director Triad National Security, LLC Los Alamos National Laboratory Bikini Atoll Road SM 30 Los Alamos, New Mexico 87545

WEL-2022-01

Dear Dr. Mason:

The Office of Enterprise Assessments' Office of Enforcement has completed an investigation into a safety incident involving a live fire near miss event, as reported into the Department of Energy's (DOE) Noncompliance Tracking System under NTS-NA-LAFO-TRIAD-FIRNGHELAB-2020-0010041, dated September 4, 2020. Based on this investigation, the Office of Enforcement identified concerns that warrant management attention by Triad National Security, LLC (Triad).

The live fire event was a near miss with the potential for death or serious injury. The event occurred on June 1, 2020, at the Los Alamos National Laboratory, Technical Area-72 (TA-72) Live Fire Range (LFR) complex, when a worker of Centerra-Los Alamos (a subcontractor) was moving a utility tractor downrange of the firing line, on Range 1, as a training instructor was test-firing a repaired M4 carbine with live ammunition (5.56 mm frangible). Prior to the event, the training instructor made several announcements (vocally and via two-way radio) that live firing was about to begin before test-firing the M4 carbine at a target positioned in front of the range's intermediate berm. The intermediate berm obscured the line of sight to the far end of the range boundary, so the training instructor could not see the worker downrange moving the utility tractor.

The Office of Enforcement's concerns relate to Triad's oversight of Centerra-Los Alamos' implementation of firearms safety requirements in 10 C.F.R. Part 851 (Part 851), *Worker Safety and Health Program*. Triad did not adequately oversee subcontractor range operation processes or work controls to protect workers at the site from the recognized hazards associated with live fire operations, specifically:

• The range operation processes and work controls were inadequate: (1) to prevent workers from going downrange during live firing activities; (2) to clear LFR surface danger zones of personnel or other hazards prior to re-starting live firing activities on a range that had not been physically monitored by workers (i.e., no personnel were present); (3) to re-start live firing activities outside of a training evolution; and (4) to identify the operational status (active or inactive) of individual ranges within the LFR complex.

• Range personnel were unable to communicate with other range personnel at the LFR complex during live fire operations. The communication methods used to test-fire a repaired weapon on Range 1 were not adequate to inform workers downrange that live firing was about to begin or to prevent live firing from occurring with a worker downrange.

The Office of Enforcement acknowledges that Triad promptly investigated the near miss event and prepared a detailed causal analysis. Triad's root cause determination that the formality of range operations at the TA-72 LFR complex was less than adequate, was appropriate. However, the causal analysis did not identify inadequacies in Triad's oversight of the subcontractor. The Office of Enforcement has determined that Triad did not exercise reasonable diligence in evaluating Centerra-Los Alamos' range operation processes and work controls. For example, Triad did not recognize that the sight-line hazards from the intermediate berm on Range 1 had not been identified or assessed. Additionally, Triad did not adequately identify potential noncompliances in Centerra-Los Alamos' range operations and work controls during multiple surveillance activities at the TA-72 LFR complex.

After the near miss event, Triad directed Centerra-Los Alamos to update its range control procedures to address the issues identified in the causal analysis. Triad's corrective action plan appears to adequately address the noncompliances associated with Centerra-Los Alamos' range operation processes and work controls. However, concerns related to Triad's oversight of subcontractor range operations were not addressed in the corrective action plan. The omission of corrective actions related to Triad's oversight responsibilities raises concerns about Triad's ability to protect workers from the recognized hazards associated with live fire operations.

The Office of Enforcement has elected to issue this Enforcement Letter to convey concerns with how Triad performs oversight of subcontractor implementation of the firearms safety requirements under Part 851. Issuance of this Enforcement Letter reflects DOE's decision to not pursue further enforcement activity against Triad at this time. In coordination with the DOE's National Nuclear Security Administration, the Office of Enforcement will continue to monitor Triad's efforts to maintain a safe and healthful workplace.

This letter imposes no requirements on Triad and no response is required. If you have any questions, please contact me at (301) 903-4033, or your staff may contact Mr. Robert Hailstone, Director, Office of Worker Safety and Health Enforcement, at (301) 903-0100.

Sincerely,

Anthony C. Pierpoint

Director

Office of Enforcement

Office of Enterprise Assessments

cc: Theodore Wyka, NA-LA Venessa Chavez, Triad National Security, LLC