



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

November 29, 2021

Mr. Jim Wright  
Director of Safety and Health  
Terracon Consultants, Inc.  
10841 South Ridgeview Road  
Olathe, Kansas 66061

SUBJECT: RESPONSE TO NRC INSPECTION REPORT 030-32176/2019-005, NOTICE OF VIOLATION

Dear Mr. Wright:

On September 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) cited Terracon Consultants, Inc., for five violations that involved the failures to: (1) control and maintain constant surveillance of licensed material in an unrestricted area that was not secured with two independent physical controls; (2) block and brace licensed material from movement incident to normal transportation; (3) follow your established operating and emergency procedures that require the gauge be placed in a U.S. Department of Transportation Type A container when being transported on public highways; (4) lock the gauge's handle of the source rod or place the gauge inside of a locked container to prevent unauthorized or accidental removal of the source rod from its shielded position; and (5) provide a notification to the NRC immediately after the discovery of any lost or missing licensed material in an aggregate quantity equal to or greater than 1,000 times the quantity specified in Appendix C of Title 10 of the Code of Federal Regulations (10 CFR) Part 20.

The NRC Inspection Report 030-32176/2019-005 with enclosed Notice of Violation required you to respond in writing in 30 days (NRC Agencywide Documents Access and Management System (ADAMS) Accession [ML21273A376](#)). In a letter dated October 29, 2021, you provided your response to the Notice of Violation (ADAMS Accession [ML21313A435](#)). Your letter made reference to prior submissions and communications with the NRC, such as your May 20, 2020 predecisional enforcement conference and your letter dated June 11, 2020, which supplemented the aforementioned conference proceedings.

After reviewing the information provided in your response to the Notice, we have concluded that your proposed actions appear to adequately address the regulatory noncompliances described in the Notice for Violations A through D. We will review your implementation of these corrective actions during a future inspection to determine whether full compliance has been restored and whether compliance will be maintained.

However, after reviewing your response to Violation E, concerning the requirement to provide an immediate notification to the NRC in accordance with 10 CFR 20.2201(a)(1)(i), the NRC has concluded that the information provided and referenced did not adequately address the violation. Specifically, the NRC notes that Terracon Consultant's management was aware of the loss of material (~1600 Eastern Standard Time (EST)) within approximately 45 minutes of

the loss occurring (~1515 EST), under such circumstances as the underlying conditions in 10 CFR 20.2201(a)(1)(i) were met or could not be disproven, and did not provide notice to the NRC until 2216 EST, approximately 7 hours after the incident and 6 hours after Terracon's management was aware of the incident. The information provided to the NRC to date on his issue has been limited to providing the timeline (e.g. the 30-day report required under 10 CFR 20.2201(b) dated December 2, 2019 (ADAMS Accession No. [ML19360A065](#))) or providing details on Terracon's existing program (e.g. supplement dated June 11, 2020 (ADAMS Accession No. [ML21245A260](#)), such as Procedures JHA TER 010 Nuclear Density Gauge Testing's requirements concerning the loss of a gauge. No substantive or material information has been provided to the NRC concerning the actions that Terracon Consultants, Inc. has taken or is planning to take to prevent future incidents from resulting in untimely notifications to the NRC. The NRC acknowledges the delay caused by the gauge user's deliberate misconduct in hiding and obscuring the true extent of the gauge's loss, however the NRC again emphasizes that, in spite of the gauge user's conduct, Terracon's management had sufficient information in-hand to conclude that an immediate notification to the NRC was appropriate and required by regulation.

As a result of the NRC's assessment concerning your response to Violation E and the need for additional information, Terracon Consultants, Inc. is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 1600 East Lamar Blvd., Arlington, Texas 76011-4511, and emailed to [R4Enforcement@nrc.gov](mailto:R4Enforcement@nrc.gov) within 30 days of the date of this letter. This reply should be clearly marked as a "Reply to a Notice of Violation; EA-20-002" and should include for Violation E: (1) the corrective steps that have been taken and the results achieved; (2) the corrective steps that will be taken; and (3) the date when full compliance will be achieved.

If an adequate reply is not received within the time specified above, an Order or a Demand for Information may be issued required information as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedures," a copy of this letter will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's ADAMS, accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,



Signed by Roldan-Otero, Lizette  
on 11/29/21

Lizette Roldán-Otero, PhD, Chief  
Materials Inspection Branch  
Division of Nuclear Materials Safety

Docket No. 030-32176  
License No. 15-27070-01

cc:  
Kimberly S. Steves, Radiation Section Chief  
State of Kansas Radiation Program

Jeffery D. Semancik, Director  
State of Connecticut Radiation Program

SUBJECT: RESPONSE TO NRC INSPECTION REPORT 030-32176/2019-005, NOTICE OF VIOLATION - DATED NOVEMBER 29, 2021

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