



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

January 19, 2017

EA-16-274

Mr. Michael R. Donnelly
Radiation Safety Officer
Terracon Consultants, Inc.
4765 West Junction Street
Springfield, MO 65802

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03038835/2016001(DNMS)
TERRACON CONSULTANTS, INC.

Dear Mr. Donnelly:

On November 29, 2016, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted a routine inspection at your facility in Springfield, Missouri, with continued in-office review through January 3, 2017. The purpose of the inspection was to review activities performed under your NRC license to ensure that activities were being performed in accordance with NRC requirements. The purpose of the in-office review was to review information that was not immediately available at the time of the onsite inspection and to assess the adequacy of the security measures for your materials. Mr. Luis Nieves of my staff conducted a final exit meeting by telephone with Mr. Michael R. Donnelly of your staff on January 3, 2017 to discuss the inspection findings. The enclosed inspection report presents the results of the inspection (Enclosure 1).

During this inspection, the NRC staff examined activities conducted under your license related to public health and safety. Additionally, the staff examined your compliance with the Commission's rules and regulations as well as the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

Based on the results of this inspection, one apparent violation of NRC requirements was identified and is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's website at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The apparent violation was of a security-related nature and is discussed in the Security Addendum to the inspection report (Enclosure 2).

Enclosure 2 contains Sensitive
Unclassified Non-Safeguards Information.
When separated from Enclosure 2, this
transmittal letter is decontrolled.

M. Donnelly

2

Because the NRC has not made a final determination in this matter, the NRC is not issuing a Notice of Violation for this inspection finding at this time. The circumstances surrounding this apparent violation, the significance of the issue, and the need for lasting and effective corrective action were discussed with Mr. Michael R. Donnelly at the inspection exit meeting on January 3, 2017.

Before the NRC makes its enforcement decision, we are providing you an opportunity to either: (1) respond in writing to the apparent violation addressed in this inspection report within 30 days of the date of this letter or (2) request a Predecisional Enforcement Conference (PEC). **Please contact Aaron T. McCraw at 630-829-9650 or Aaron.McCraw@nrc.gov within ten days of the date of this letter to notify the NRC of your intended response.**

If you choose to provide a written response, it should be clearly marked as "Response to the Apparent Violation in Inspection Report No. 03038835/2016001(DNMS); EA-16-274," and should include, for the apparent violation: (1) the reason for the apparent violation, or, if contested, the basis for disputing the apparent violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance was or will be achieved. In presenting your corrective actions, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any civil penalty for the apparent violation. The guidance in NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be useful in preparing your response. You can find the information notice on the NRC's website at: <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/1996/in96028.html>. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision or schedule a PEC.

If you choose to request a PEC, it will afford you the opportunity to provide your perspective on the apparent violation and any other information that you believe the NRC should take into consideration before making an enforcement decision. The topics discussed during the conference may include the following: information to determine whether a violation occurred, information to determine the significance of a violation, information related to the identification of a violation, and information related to any corrective actions taken or planned to be taken. If a PEC is held, the NRC will issue a press release to announce the time and date of the conference; however, the PEC will be closed to public observation due to the security-related nature of the finding.

Because your facility has not been the subject of escalated enforcement action within the last two years or two inspections, a civil penalty may not be warranted in accordance with Section 2.3.4 of the Enforcement Policy. In addition, based upon NRC's understanding of the facts and your corrective actions, it may not be necessary to conduct a PEC in order to enable the NRC to make a final enforcement decision. Our final decision will be based on your confirming on the license docket that the corrective actions previously described to the staff have been or are being taken.

Please be advised that the number and characterization of the apparent violations described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results of our deliberations on this matter.

M. Donnelly

3

In accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter and Enclosure 1 will be available electronically for public inspection in the NRC's Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC's website at <http://www.nrc.gov/reading-rm/adams.html>. However, Enclosure 2 contains security-related information; its disclosure to unauthorized individuals could present a security vulnerability. Therefore, Enclosure 2 will not be made available electronically for public inspection. Enclosure 2 must be protected from unauthorized disclosure.

Please feel free to contact Mr. Nieves if you have any questions regarding this inspection. Mr. Nieves can be reached at 630-829-9571.

Sincerely,

/RA Christine Lipa Acting for/

John B. Giessner, Director
Division of Nuclear Materials Safety

Docket No. 03038835
License No. 24-35241-01

Enclosures:

1. IR 03038835/2016001(DNMS) (public)
2. Security Addendum to IR (non-public)

cc w/encl 1: State of Missouri

M. Donnelly

4

Letter to Michael R. Donnelly from John B. Giessner dated January 19, 2017

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 03038835/2016001(DNMS)
TERRACON CONSULTANTS, INC.

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**U.S. Nuclear Regulatory Commission
Region III**

Docket No. 030-38835

License No. 24-35241-01

Report No. 03038835/2016001(DNMS)

EA No./NMED No. EA-16-274

Licensee: Terracon Consultants, Inc.

Facility: 4765 West Junction Street
Springfield, MO 65802

Inspection Dates: November 29, 2016, with continued
in office review through January 3, 2017

Exit Meeting Date: January 3, 2017

Inspector: Luis Nieves, Health Physicist

Approved By: Aaron T. McCraw, Chief
Materials Inspection Branch
Division of Nuclear Materials Safety

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Unclassified Non-Safeguards Information.
When separated from Enclosure 2, this
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Enclosure 1

EXECUTIVE SUMMARY

**Terracon Consultants, Inc.
NRC Inspection Report 03038835/2016001(DNMS)**

This was a routine inspection of a radiography license, with activities involving the use of byproduct material (iridium-192). Terracon Consultants, Inc. is a company located in Springfield, Missouri. The U.S. Nuclear Regulatory Commission (NRC) License No. 24-35241-01 authorizes Terracon Consultants, Inc. to use SPEC Model 150 industrial radiography equipment for non-destructive testing.

During the inspection, the inspector identified security-related findings. The findings are discussed in detail in the non-public Security Addendum to this Inspection Report.

REPORT DETAILS

1 Program Overview and Inspection History

Terracon Consultants, Inc. is a non-destructive testing company authorized to use radioactive material for industrial radiography on the premises of Paul Mueller Company, a stainless steel component manufacturing company in Springfield, Missouri, and at temporary jobsites where the NRC maintains jurisdiction. The licensee conducts radiography mostly in a dedicated area of the manufacturing plant where the licensee has constructed permanent walls of concrete to provide shielding. At the time of the inspection, the licensee employed two radiographers including the Radiation Safety Officer to perform radiographic operations Monday through Friday.

The last NRC inspection of this licensee was conducted on December 17, 2015, and was the initial inspection of activities conducted under this license since the license was issued on July 31, 2015. No violations were identified as a result of this inspection.

2 Radiation Safety Program

2.1 Inspection Scope

The inspector reviewed the licensee's safety program by reading selected records, touring the facilities, and interviewing selected licensee staff members, such as the Radiation Safety Officer and another radiographer.

2.2 Observations and Findings

The inspector toured the field office in Springfield to evaluate the licensee's measures for hazard communication and exposure control. Independent and confirmatory surveys of this facility with all licensed material in storage found no exposures to members of the public in excess of regulatory limits. The inspector was unable to observe the conduct of radiographic operations, as none were scheduled while the inspector was on site. However, licensee personnel were able to demonstrate the implementation of procedures for use and transportation of licensed material. Through these demonstrations and other discussions, the inspector found the licensee's staff to be knowledgeable of radiation protection principles and licensee procedures. The inspector also reviewed a selection of safety-related records, including quarterly equipment maintenance and inventories, leak tests, instrument calibrations, radiographer audits, refresher training, and dosimetry.

2.3 Conclusions

No violations of NRC safety requirements were identified.

3 Exit Meeting Summary

On November 29, 2016, the inspector presented preliminary inspection findings following the onsite inspection. The licensee did not identify any documents or processes reviewed by the inspectors as proprietary. A final exit meeting was conducted by telephone on January 3, 2017. The licensee acknowledged the findings presented.

LIST OF PERSONNEL CONTACTED

Michael R. Donnelly, Site RSO
Attended exit meeting on January 3, 2017

INSPECTION PROCEDURES (IP) USED

IP 87121: Industrial Radiography Program