



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

April 1, 2020

EA-20-002
NRC Event No. 54411

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

SUBJECT: NRC INSPECTION REPORT 030-32176/2019-005

Dear Mr. Wright:

This letter refers to the announced reactive inspection conducted on December 18, 2019, at your facility in Rocky Hill, Connecticut. The inspection was performed in response to a notification that a portable nuclear gauge had been lost and recovered following the conduct of licensed activities on November 25, 2019, in Killingly, Connecticut.

This inspection examined activities conducted under your license as they relate to public health and safety and to confirm compliance with the U.S. Nuclear Regulatory Commission's (NRC) rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of an examination of selected procedures and representative records and interviews with personnel both directly and indirectly involved in the event. The enclosed inspection report presents the results of this inspection. The inspector discussed the preliminary inspection findings with Mr. Adam Maier, Corporate Radiation Safety Officer, and other members of your staff on December 18, 2019, at the conclusion of the onsite portion of the inspection. A final exit briefing was conducted telephonically with you and Mr. Maier on March 5, 2020.

Based on the results of this inspection, five apparent violations were identified and are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The apparent violations involved Terracon Consultants, Inc.'s (Terracon) failure to: (1) control and maintain constant surveillance of licensed material in a controlled or unrestricted area and that was not in storage, and to provide two independent physical controls whenever a portable gauge is not under the control and constant surveillance of the licensee; (2) provide a notification to the NRC immediately after the discovery of any lost, stolen, 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; (3) block and brace licensed material from movement incident to normal transportation; (4) lock the gauge's handle of the source rod or placement of the gauge inside of a locked container to prevent unauthorized or accidental removal of the source rod from its shielded position; and (5) follow Terracon Operating and Emergency procedures associated with the license, specifically the requirement for the gauge user to use a U.S. Department of Transportation Type A container when transporting the gauge. The

circumstances surrounding these apparent violations, the significance of the issues, and the need for lasting and effective corrective action were discussed with you and Mr. Maier on the telephonic exit call on March 5, 2020.

The NRC considers these apparent violations significant because the NRC entrusts licensees with the control of radioactive material. Terracon lost control of radioactive material which entered into the public domain, and as a result, radioactive material was lost in a manner that had a substantial potential to cause damage to the radioactive source and cause radiation exposures to members of the public in excess of NRC regulatory limits.

Before the NRC makes its enforcement decision, we are providing you an opportunity to request a predecisional enforcement conference (PEC) or request alternative dispute resolution (ADR). If a PEC is held, it will be open for public observation and the NRC may issue a press release to announce the time and date of the conference. Please contact Ms. Patricia Silva at 817-200-1455 within 10 days of the date of this letter to inform us of your decision to participate in a PEC or ADR. A PEC should be held within 30 days or an ADR session within 45 days of the date of this letter.

If you choose to request a PEC, the conference will afford you the opportunity to provide your perspective on these matters and any other information that you believe the NRC should take into consideration before making an enforcement decision. The decision to hold a PEC does not mean that the NRC has determined that a violation has occurred or that an enforcement action will be taken. This conference would be conducted to obtain information to assist the NRC in making an enforcement decision. The topics discussed during the conference may include 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.

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 violations. The guidance in NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful in preparing your response. You can find the Information Notice on the NRC website at: <http://www.nrc.gov/docs/ML0612/ML061240509.pdf>.

In lieu of a PEC, you may also request ADR with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a neutral third party. The technique that the NRC has decided to employ is mediation. Mediation is a voluntary, informal process in which a trained neutral mediator (the "mediator") works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues.

Additional information concerning the NRC's program can be obtained at <http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral third party. Please contact ICR at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.

In addition, please be advised that the number and characterization of 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.

In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room and from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy or proprietary information so that it can be made available to the public without redaction.

If you have any questions concerning this matter, please contact Ms. Patricia Silva of my staff at 817-200-1455.

Sincerely,

Mary Muessle, Director
Division of Nuclear Materials Safety

Docket: 030-32176
License: 15-27070-01

Enclosure:
NRC Inspection Report 030-32176/2019-005

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

Jeffrey D. Semancik, Director
State of Connecticut Radiation Program

NRC INSPECTION REPORT 030-32176/2019-005- DATED April 1, 2020

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Keyword:

By: JEV

☒ Yes ☐ No☒ Publicly Available☐ Sensitive

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U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket: 030-32176

License: 15-27070-01

Report: 2019-005

EA No: EA-20-002

Licensee: Terracon Consultants, Inc.

Location Inspected: 201 Hammer Mill Road,
Rocky Hill, CT

Inspection Dates: Onsite December 18, 2019 with in-office review through
January 29, 2020

Exit Meeting Date: March 5, 2020

Inspector: Steven Courtemanche, Health Physicist
Commercial, Industrial, R&D, and Academic Branch
Division of Nuclear Materials Safety, Region I

Region IV Point of Contact: Jason vonEhr, Health Physicist
Materials Inspection Branch
Division of Nuclear Materials Safety, Region IV

Approved By: Patricia A. Silva, Chief
Materials Inspection Branch
Division of Nuclear Materials Safety

Attachment: Supplemental Inspection Information

Enclosure

EXECUTIVE SUMMARY

Terracon Consultants, Inc. NRC Inspection Report 030-32176/2019-005

On December 18, 2019, a special announced inspection was conducted at the licensee's Rocky Hill, Connecticut, field office in response to the November 25, 2019, incident reported in the NRC Event Notification Report 54411. The inspection consisted of an examination of selected procedures and representative records and interviews with personnel both directly and indirectly involved in the event.

Program Overview

Terracon Consultants, Inc. (Terracon) is authorized under NRC Materials License 15-27070-01 to possess and use byproduct materials, including cesium-137 and americium-241, for use in portable nuclear gauges to measure the physical properties of materials. Licensed activities were authorized to be performed at 13 field offices in NRC jurisdiction as of Amendment 51 of the NRC license, as well as at temporary job sites in areas of NRC jurisdiction. (Section 1)

Historical Background

Prior to the November 25, 2019, event, the licensee was involved with two events that resulted in the NRC issuing significant enforcement actions. Both prior events resulted in special inspections being performed in response; the first was performed in response to an event on December 21, 2016, in Conway, Missouri (NRC Event Number 52453), and a second inspection was performed in response to an event on June 28, 2018, in Lee's Summit, Missouri (no associated NRC Event Number, as the incident was caused by a transportation case falling off a truck). (Section 2)

Inspection Findings

Five apparent violations were identified which involved Terracon's failure to: (1) control and maintain constant surveillance of licensed material in a controlled or unrestricted area and that was not in storage, and to provide two independent physical controls whenever a portable gauge is not under the control and constant surveillance of the licensee; (2) provide a notification to the NRC immediately after the discovery of any lost, stolen, 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* Part 20; (3) block and brace licensed material from movement incident to normal transportation; (4) lock the gauge's handle of the source rod or placement of the gauge inside of a locked container to prevent unauthorized or accidental removal of the source rod from its shielded position; and (5) follow Terracon Operating and Emergency procedures associated with the license, specifically the requirement for the gauge user to use a U.S. Department of Transportation Type A container when transporting the gauge.

As a result of the above apparent violations, a portable gauge fell out of the licensee's pickup truck while being transported back to the field office in Rocky Hill, Connecticut. The portable gauge was retrieved by a member of the public and brought to a Local Law Enforcement Agency. The licensee retrieved the portable gauge from the Local Law Enforcement Agency the same day. (Section 3)

REPORT DETAILS

1. Program Overview (87103 & 87124)

1.1. Program Scope

Terracon Consultants, Inc., (Terracon) is authorized under U.S. Nuclear Regulatory Commission (NRC) Materials License 15-27070-01 to possess and use byproduct materials, including cesium-137 and americium-241, for use in portable nuclear gauges to measure the physical properties of materials. Licensed activities were authorized to be performed at 13 field offices in NRC jurisdiction as of Amendment 51 of the NRC license, as well as at temporary job sites in areas of NRC jurisdiction.

1.2. Inspection Scope

On December 18, 2019, the inspector performed an announced special inspection of Terracon at the licensee's Rocky Hill, Connecticut, field office, with in-office reviews through January 29, 2020. The scope of the inspection was to examine the facts and circumstances surrounding the November 25, 2019, event (NRC Event 54411) that occurred en route from a temporary job site in Killingly, Connecticut. The event resulted in the temporary loss of control of licensed radioactive material into the public domain that was later recovered by and turned over to a Local Law Enforcement Agency (LLEA) by a member of the public.

Within these areas, the inspection consisted of an examination of selected procedures and representative records and interviews with personnel both directly and indirectly involved in the event.

2. Background

2.1. NRC Event 54411 – November 25, 2019

On November 25, 2019, the licensee reported to the NRC's Headquarters Operations Officer (HOO) of the licensee's loss and recovery of a portable nuclear density gauge. The licensee's technician had completed work at a temporary job site in Killingly, Connecticut, and shortly after leaving the job site the technician realized that the tailgate to the vehicle was down and the technician did not see the portable gauge in the bed of the vehicle.

The licensee searched for the gauge for approximately 4 hours before contacting the LLEA to report the loss. The LLEA representative informed the licensee that a device of similar description had been turned into the LLEA by a member of the public at about 1630 Eastern Standard Time (EST). The licensee recovered the portable gauge from the LLEA and determined that the portable gauge's shielding was not compromised. Later analysis of the wipe tests taken at the time of recovery of the portable nuclear gauge determined that the sealed sources were not leaking.

2.2. Historical Event – Incident on December 21, 2016

On February 7, 2017, the NRC conducted an announced special inspection of Terracon at its Springfield, Missouri office (NRC Inspection Report 030-32176/2017-001, NRC's

Agencywide Documents Access and Management System (ADAMS) Accession No. ML17240A407). This inspection was conducted in response to NRC Event 52453, which involved a portable gauge that was damaged on December 21, 2016, at a temporary job site in Conway, Missouri.

The inspection resulted in a single Severity Level III violation (ADAMS Accession No. ML17319A437) for failure to control and maintain constant surveillance of licensed material that was in a controlled or unrestricted area in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 20.1802.

2.3. Historical Event – Incident on June 28, 2018

On July 12, 2018, the NRC conducted an announced special inspection of Terracon at its Olathe, Kansas office (NRC Inspection Report 030-32176/2018-002, ADAMS Accession No. ML18260A187). This inspection was conducted in response to an incident which involved a transportation case for a portable gauge that was found by the State of Missouri Department of Transportation and reported to the NRC on July 2, 2018. Since this report was regarding accessories for radioactive material, and not radioactive material itself, there was no reporting criteria and, therefore, no NRC Event Number was generated. This transportation case was determined to be from Terracon's portable gauge work that occurred on June 28, 2018, in Lee's Summit, Missouri.

The inspection resulted in a Severity Level III Problem (ADAMS Accession No. ML17319A437) for the failure to control and maintain constant surveillance of licensed material that was in a controlled or unrestricted area in accordance with 10 CFR 20.1802 and the failure to provide two independent physical controls that form tangible barriers to secure a portable gauge from unauthorized removal whenever the gauge was not under the control and constant surveillance of the license, in accordance with 10 CFR 30.34(i).

In addition, the inspection resulted in two Severity Level IV violations for the failure to block-and-brace a shipment of Class 7 (radioactive) material to prevent shifting during normal transportation conditions in accordance with 49 CFR 173.448(a) and the failure to use a U.S. Department of Transportation (DOT) Type A shipping container in accordance with the licensee's procedures as required by Terracon's NRC license.

2.4. Other NRC inspections since 2017

From the NRC's 2017 inspection in response to NRC Event 52453 through the end of calendar year 2019, and excluding the July 12, 2018, special inspection, the NRC conducted nine inspections of Terracon. These inspections included field offices and temporary job sites in areas of NRC jurisdiction. The inspection (NRC Inspection Report 030-32176/2019-003, ADAMS Accession No. ML19225D225) conducted in St. Louis, Missouri, resulted in a Severity Level IV violation for the failure to include required information on a transportation label in accordance with 49 CFR 172.403(g).

A second inspection (NRC Inspection Report 030-32176/2019-0001, ADAMS Accession No. ML19120A476) conducted in Rocky Hill and South Windsor, Connecticut, resulted in a non-cited violation for the licensee's self-identified and self-corrected failure to accurately complete a utilization log describing the licensed radioactive material,

responsible user, and temporary job site(s) at which the licensed radioactive material would be used. All of the remaining NRC inspections resulted in no violations of greater-than-minor significance being identified.

3. Observations and Findings

On December 18, 2019, the inspector interviewed licensee personnel to develop a timeline of the November 25, 2019, incident and determine the apparent causes for the incident. The licensee's technician informed the inspector that they had completed work at the temporary job site in Killingly, Connecticut, and placed the portable gauge on the bed of truck near the open tailgate. The technician went into the truck's cab and began filling out paperwork.

On November 25, 2019, at approximately 1500 EST, the technician left the job site without securing the portable gauge in the transportation case as required by 49 CFR 173.448(a) and the licensee's procedures (License Condition 20). At about 1515 EST while driving on a public highway, the technician noted that the tailgate was down and the technician could not see the portable gauge. The portable gauge had fallen off the truck. The failure to maintain control and constant surveillance of the portable gauge was a violation of 10 CFR 20.1802. The technician retraced their route searching for the portable gauge did not find the gauge. The technician informed the site radiation safety officer (RSO) at 1600 EST of the event.

The inspector confirmed with the technician that only the portable gauge had fallen out of the truck. The technician stated that the trigger lock on the handle of the portable gauge had been cut off a few days prior when the lock was put on "backwards" and would not come off. Therefore, after completing the work at the temporary job site the technician could not engage the trigger lock. The technician stated that, other than the incident of November 25, 2019, the technician was either with the portable gauge or it was locked inside the transport case. The licensee was required by License Condition 17 of NRC license 15-27070-01, Amendment 51, to either lock the handle of the portable gauge or keep the portable gauge in a locked outer container to prevent unauthorized access or accidental removal of the sealed source from the shielded position.

When the site RSO was informed of the loss of the portable gauge, additional licensee assistance was dispatched to search for the portable gauge. At 1900 EST, the site RSO contacted LLEA and the site RSO was told that a portable gauge similar to the licensee's description was in the LLEA's possession. The licensee recovered the gauge from LLEA at 2233 EST on the same day.

The LLEA indicated to the licensee that the portable gauge was returned to the licensee in the same condition as it was received; the cesium-137 source rod had not been manipulated by the LLEA. A member of the public recovered the portable gauge from the highway after it fell off the licensee's vehicle and brought the portable gauge to the LLEA. The LLEA also stated to the licensee that it did not have any identifying information regarding the member of the public that provided the LLEA with the portable gauge.

The corporate RSO notified the NRC's HOO of the loss and recovery of the portable gauge at 2216 EST on the same day as the incident. The licensee did not immediately

report the loss of licensed material in aggregate greater than 1,000 times the respective values in 10 CFR Part 20, Appendix C, as required by 10 CFR 20.2201(a), which became known to the licensee at approximately 1515 EST. The licensee notified the NRC approximately 7 hours after becoming aware that a gauge was missing.

During the period of time between the technician driving away from the temporary job site in Killingly, Connecticut, to the time that the gauge fell off the back of the licensee's vehicle, the portable gauge was not blocked and braced nor being transported within a DOT Type A container, in accordance with DOT regulations and the licensee's operating and emergency procedures.

The NRC's review of the facts, circumstances, and the licensee's response to the November 25, 2019, incident resulted in the identification of five apparent violations of NRC requirements.

3.1. Apparent Violation 1: Control and Surveillance of Radioactive Material

10 CFR 20.1802 requires that the licensee control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage.

10 CFR 30.34(i) requires, in part, that each portable gauge licensee shall use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee.

Contrary to the above, on November 25, 2019, the licensee failed to control and maintain constant surveillance of licensed material that was not in storage and failed to use a minimum of two independent physical controls that formed tangible barriers to secure the gauge while it was not under control and constant surveillance. Specifically, the licensee placed a portable gauge in the bed of a pickup truck with no barriers and without maintaining constant surveillance of the device when transporting the gauge from a temporary job site to a licensee facility. (030-32176/2019-005-01)

3.2. Apparent Violation 2: Reporting Lost or Missing Radioactive Material

10 CFR 20.2201(a)(1)(i) requires, in part, that each licensee shall report by telephone immediately after its occurrence becomes known to the licensee, any lost or missing licensed material in an aggregate quantity equal to or greater than 1,000 times the quantity specified in 10 CFR Part 20, Appendix C, under such circumstances that it appears to the licensee that an exposure could result in persons in unrestricted areas.

10 CFR Part 20, Appendix C, provides a value of 0.001 microcuries for americium-241 and 10 microcuries for cesium-137.

Contrary to the above, on November 25, 2019, the licensee failed to report by telephone immediately after its occurrence became known to the licensee, any lost or missing licensed material in an aggregate quantity equal to or greater than 1,000 times the quantity specified in 10 CFR Part 20 Appendix C. Specifically, the licensee identified on November 25, 2019, at approximately 1515 EST that licensed radioactive material (a portable nuclear gauge containing 40 millicuries of americium-241 and 10 millicuries of cesium-137, which represents greater than 1,000 times the Appendix C values) was lost

or missing, and a report was not made to the NRC until 2216 EST of the day of the incident. (030-32176/2019-005-02)

While 10 CFR Part 20 does not specify or define what 'immediate' means in terms of reporting criteria, the licensee was also subject to certain immediately reportable circumstances under 10 CFR 30.50, which specified that 'immediate' reporting shall be made as soon as possible but no later than 4 hours after the discovery of the applicable event or circumstance.

3.3. Apparent Violation 3: Blocking and Bracing Transportation Packages

10 CFR 71.5(a), requires, in part, that each licensee who transports licensed material outside the site of usage, as specified in the NRC license, or where transport is on public highways, shall comply with the applicable requirements of the DOT regulations in 49 CFR Parts 107, 171 through 180, and 390 through 397, appropriate to the mode of transport.

49 CFR 173.448(a) requires that each shipment of Class 7 (radioactive) materials must be secured to prevent shifting during normal transportation conditions.

Contrary to the above, on November 25, 2019, for a shipment of Class 7 (radioactive) materials, the licensee failed to secure the shipment to prevent shifting during normal transportation conditions. Specifically, the licensee placed a portable nuclear gauge unsecured on the bed of a pickup truck and began transporting it by highway until, under conditions normally incident to transportation, the portable gauge fell out of the vehicle. (030-32176/2019-005-03)

3.4. Apparent Violation 4: Safety Lock

License Condition 17 of NRC Materials License 15-27070-01, Amendment 51, dated October 3, 2019, requires, in part, that each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage or when not under the direct surveillance of an authorized user.

Contrary to the above, on November 25, 2019, for a portable nuclear gauge, the licensee failed to have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position when in transport, storage or when not under the direct surveillance of an authorized user. Specifically, the licensee transported and left a portable nuclear gauge uncontrolled in the public domain and the gauge was not locked or in a locked container to prevent unauthorized or accidental removal of the sealed source from its shielded position. (030-32176/2019-005-04)

3.5. Apparent Violation 5: Procedural Violation

License Condition 20 of NRC Materials License 15-27070-01, Amendment No. 51, dated October 3, 2019, requires, in part, that the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, contained in the application dated July 3, 2013.

In the application dated July 3, 2013, Item 12, the licensee committed to following and applying operating, emergency, and security procedures consistent with the criteria in section entitled "Radiation Safety Program – Operating and Emergency Procedures" and the errata sheet to Appendix H of NUREG-1556, Vol. 1, Rev. 1.

The licensee's operating procedure JHA010, "Nuclear Density Gauge Testing," Revision 0316, required, in part, that the gauge be placed in a [DOT] Type A case at all times when not used and when transporting on public city streets and highways.

Contrary to the above, on November 25, 2019, the licensee failed to place a gauge in a DOT Type A case when transporting the gauge on public city streets and highways. Specifically, the gauge user began transporting the portable gauge by highway and failed to secure the gauge within the DOT Type A container prior to transport. (030-32176/2019-005-05)

4. Corrective Actions

During the initial response to the incident, the licensee recovered the missing portable gauge and therefore withdrew the device from the public domain and back into the licensee's possession.

The licensee indicated that the incident has been discussed with the Rocky Hill, Connecticut, field office's staff to explain the importance of securing licensed material in transport. The licensee revoked the technician's approval for use of portable gauges pending an administrative review of the incident. In addition, the corporate RSO stated that the incident would be discussed at the other field offices during the licensee's Safety Meetings.

5. Exit Meeting Summary

At the conclusion to the on-site inspection, the inspector provided the preliminary inspection findings to on-site management and the corporate RSO by telephone. The licensee was represented at the preliminary exit meeting by Adam Maier, Corporate RSO; Kristian Swanson, Site RSO, Erik Armas, Project Manager; and Michael Sullivan, Office Manager.

On March 5, 2020, the NRC conducted a final telephonic exit briefing with Terracon. The licensee was represented by Jim Wright, Director of Safety and Health, and Mr. Adam Maier.

The licensee acknowledged the inspection findings and did not dispute any of the details presented during the call.

Supplemental Inspection Information

PARTIAL LIST OF PERSONS CONTACTED

Adam Maier – Corporate RSO (Olathe, Kansas)
Kristan Swanson – Rocky Hill, CT, Site RSO
Erik Armas – Rocky Hill, CT, Project Manager
Michael Sullivan – Rocky Hill, CT, Office Manager
Tracy Eggleston – Rocky Hill, CT, Portable Gauge User

INSPECTION PROCEDURES USED

87103 – Inspection of Materials Licensee's Involved in an Incident or Bankruptcy Filing
87124 – Fixed and Portable Gauge Programs

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

030-32176/2019-005-01	AV	Failure to control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage. (10 CFR 20.1802)
030-32176/2019-005-02	AV	Failure to immediately report after its occurrence becomes known to the licensee, any lost or missing licensed material in an aggregate quantity equal to or greater than 1,000 times the quantity specified in 10 CFR Part 20 Appendix C. (10 CFR 20.2201(a)(1)(i))
030-32176/2019-005-03	AV	Failure to secure each shipment of Class 7 (radioactive) materials to prevent shifting during normal transportation conditions. (10 CFR 71.5(a), 49 CFR 173.448(a))
030-32176/2019-005-04	AV	Failure to have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position when in transport, storage, or not under the direct surveillance of an authorized user. (License Condition 17)
030-32176/2019-005-05	AV	Failure to place a portable gauge in a DOT Type A case at all times when not used and when transporting on public city streets and highways. (License Condition 20)

Closed

None

Discussed

None

LIST OF ACRONYMS USED

ADAMS	Agency-wide Documents Access and Management System
ADR	Alternative Dispute Resolution
AV	Apparent Violation
CFR	<i>Code of Federal Regulations</i>
DOT	U.S. Department of Transportation
EST	Eastern Standard Time
HOO	[NRC] Headquarters Operations Officer
LLEA	Local Law Enforcement Agency
NRC	U.S. Nuclear Regulatory Commission
PEC	Predecisional Enforcement Conference
RSO	Radiation Safety Officer