



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

January 13, 2020

EA-19-127

Ms. Glenda JC Radvansky, P.E.
Acting Engineering Manager
Municipality of Anchorage
4700 Elmore Road
Anchorage, Alaska 99507

SUBJECT: ERRATA FOR NRC INSPECTION REPORT 030-20410/2019-001

Dear Ms. Radvansky:

During the Municipality of Anchorage's review of the subject inspection report dated December 18, 2019, (NRC's Agencywide Documents Access and Management System (ADAMS) Accession Number ML19353C036), it was identified that the report identified an incorrect license number for the Municipality of Anchorage. The U.S. Nuclear Regulatory Commission (NRC) is issuing a corrected copy of our inspection report, which is enclosed with this letter. Please note that none of the technical content of the inspection report has changed and your required response options, as described in the December 18, 2019, letter, remain the same.

In accordance with Title 10 of the *Code of Federal Regulations* 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 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.

G. Radvansky

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If you have any questions regarding this letter or the Enclosure, please contact Mr. Jason vonEhr of my staff at 817-200-1186.

Sincerely,



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

Docket: 030-20410

License: 50-15852-02

Enclosure:

NRC Inspection Report 030-20410/2019-001

cc w/encl:

Irene Casares

State of Alaska Radiation Program



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

December 18, 2019

EA-19-127

Ms. Glenda JC Radvansky, P.E.
Acting Engineering Manager
Municipality of Anchorage
4700 Elmore Road,
Anchorage, Alaska 99507

SUBJECT: MUNICIPALITY OF ANCHORAGE - NRC INSPECTION REPORT
030-20410/2019-001

Dear Ms. Radvansky:

This letter refers to the unannounced routine inspection conducted on August 28-29, 2019, at your facilities in Anchorage, Alaska. The purpose of the inspection was to examine 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's) rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, independent radiation measurements, and interviews with personnel. The enclosed report presents the results of the inspection.

The preliminary inspection findings were discussed with Mr. Timothy Huntting, P.E., Geotechnical Lab Manager, and Mr. Russel Oswald, P.E., L.S., Project Manager, at the conclusion of the onsite portion of the inspection on August 29, 2019. A final exit briefing was conducted telephonically with you, Mr. Huntting, and Mr. Oswald on December 10, 2019.

Based on the results of this inspection, the NRC has determined that 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's Web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html>. The apparent violations involved the failures to: (1) have the individual authorized on NRC License 50-15852-02 fulfilling the duties and responsibilities of the radiation safety officer; (2) perform physical inventories every 6 months; (3) use a correct United Nations identification number for hazardous materials description for U.S. Department of Transportation shipping papers; (4) implement the NRC's Model Operating and Emergency Procedures committed to during the 2011 license renewal process; and (5) perform annual reviews of the radiation protection program. These were identified by the NRC during the August 28-29, 2019, unannounced inspection.

The NRC considers the apparent violation involving the radiation safety officer as significant. The individual named on an NRC license and approved by the NRC has the authority and qualifications to execute the duties of the position and thereby provide a basis for confidence to

the NRC that the licensee will use radioactive materials in a safe and secure manner. The failure to have this individual in the position, and the apparent failure to have any qualified individual in this position, provides substantial potential for other regulatory violations with safety or security significance to occur without identification or correction.

Before the NRC makes its enforcement decision, we are providing you an opportunity to: (1) respond in writing to the apparent violations addressed in the inspection report within 30 days of the date of this letter, (2) request a predecisional enforcement conference (PEC), or (3) 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. If you decide to participate in a PEC or pursue ADR, please contact Ms. Patricia Silva at 817-200-1455 within 10 days of the date of this letter. A PEC should be held within 30 days and an ADR session within 45 days of the date of this letter.

If you choose to provide a written response, it should be clearly marked as a "Response to Apparent Violations in NRC Inspection Report 030-20410/2019-001; EA-19-127" and should include for each 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; and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. Additionally, your response should be sent to the NRC, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy mailed to Michael C. Hay, Director, Division of Nuclear Materials Safety, Region IV, 1600 East Lamar Boulevard, Arlington, Texas, 76011, within 30 days of the date of this letter. 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, 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 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 written response or 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 (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,

/RA/

Michael C. Hay, Director
Division of Nuclear Materials Safety

Docket: 030-20410
License: 50-15852-02

Enclosure:
NRC Inspection Report 030-20410/2019-001

cc w/Enclosure:
Irene Casares
State of Alaska Radiation Program

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket: 030-20410

License: 50-15852-02

Report: 2019-001

EA No: EA-19-127

Licensee: Municipality of Anchorage
Public Works Department

Location Inspected: 3630 East Tudor Road
Anchorage, Alaska

Inspection Dates: Onsite August 28-29, 2019 with in-office review through
November 14, 2019

Exit Meeting Date: December 10, 2019

Inspectors: Jason vonEhr, Health Physicist
Materials Inspection Branch
Division of Nuclear Materials Safety

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

Attachment: Supplemental Inspection Information

Enclosure

EXECUTIVE SUMMARY

Municipality of Anchorage Public Works Department NRC Inspection Report 030-20410/2019-001

On August 28-29, 2019, the U.S. Nuclear Regulatory Commission (NRC) performed an unannounced routine inspection of the Municipality of Anchorage, Public Works Department in Anchorage, Alaska, with in-office reviews through November 14, 2019. The scope of the inspection was to examine the activities conducted under the license as they relate to public health and safety and to confirm compliance with the NRC's rules and regulations and with the conditions of the license.

Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, independent radiation measurements, and interviews with personnel.

Program Overview

The Municipality of Anchorage, Public Works Department was authorized under NRC Materials License 50-15852-02 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 the licensee's Anchorage, Alaska facility, as well as at temporary job sites in areas of NRC jurisdiction. (Section 1)

Inspection Findings

The inspection identified five apparent violations of NRC requirements involving the licensee's failure to: (1) have the individual authorized on NRC Materials License 50-15852-02 fulfilling the duties and responsibilities of the radiation safety officer; (2) perform physical inventories every 6 months; (3) use a correct United Nations Identification Number for hazardous materials description for U.S. Department of Transportation shipping papers; (4) implement the NRC's Model Operating and Emergency Procedures committed to during the 2011 license renewal process; and (5) perform annual reviews of the radiation protection program. (Section 3)

Corrective Actions

During the inspection, the licensee immediately addressed or provided commitments to correct the noncompliances identified. These immediate corrective actions included: (1) conducting a physical inventory of all specifically-licensed radioactive material possessed; (2) providing immediate training on and copies of the NRC's Model Operating and Emergency Procedures to gauge users; and (3) correcting the United Nations Identification Number on shipping papers for the shipment of hazardous materials. Following the inspection, the licensee submitted an amendment request by a letter dated October 18, 2019, to name the acting Radiation Safety Officer on the license following that individual's completion of formal qualification training. (Section 5)

REPORT DETAILS

1. Program Overview (87124)

1.1. Program Scope

The Municipality of Anchorage (MoA), Public Works Department was authorized under U.S. Nuclear Regulatory Commission (NRC) Materials License 50-15852-02 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 the licensee's Anchorage, Alaska facility, as well as at temporary job sites in areas of NRC jurisdiction.

At the time of the inspection, the licensee possessed six portable nuclear gauges under the NRC license. These included two Troxler Model 3440 devices (serial number 17655 & 30661), a Troxler Model 4640-B (serial number 1148), a Troxler Model 3411-B (serial number 13103), and a pair of Troxler Model 3241-C (serial number 772 & 2212). In addition, the inspector observed that the licensee possessed a large number of generally-licensed self-luminous tritium (hydrogen-3) exit signs within its facilities. These devices were not possessed under the authorizations of NRC license 50-15852-02, but rather the general license issued automatically under Title 10 of the *Code of Federal Regulations* (10 CFR) 31.5.

1.2. Inspection Scope

On August 28-29, 2019, the NRC inspector performed an unannounced routine inspection of the MoA in Anchorage, Alaska, with in-office reviews through November 14, 2019. The scope of the inspection was to examine the activities conducted under the license as they relate to public health and safety and to confirm compliance with the NRC's rules and regulations and with the conditions of the license.

Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, independent radiation measurements, and interviews with personnel.

2. Timeline of the Apparent Violation Involving the Radiation Safety Officer

In interviews conducted on August 28-29, 2019, and in subsequent communications submitted to the NRC (letters dated September 13, 2019, NRC's Agency Document Access Management System (ADAMS) Accession Number ML19261A146, and electronic mail dated September 30, 2019, ADAMS Accession Number ML19319A547), the inspector established a timeline of the apparent violation concerning the radiation safety officer (RSO).

2.1. Prior to September 30, 2017

The licensee's prior RSO (hereafter "RSO 1") had served as the RSO at the MoA for approximately 32 years. In the year prior to September 30, 2017, RSO 1 took an extensive leave of absence from the MoA starting on or around April 13, 2017. During this period, RSO 1 was unable to effectively carry out some of the functions and responsibilities of RSO, which contributed to some of the apparent violations that are

discussed in Section 3. During this interim period prior to the retirement of RSO 1, the Materials Lab continued its normal daily activities, including the use of the portable nuclear gauges, under the principle gauge user (hereafter "Gauge User 1"). According to MoA, Gauge User 1 was to continue acting under the policies and procedures established by RSO 1 prior to RSO1's departure.

2.2. Retirement of Prior Radiation Safety Officer on September 30, 2017

RSO 1 retired from MoA on September 30, 2017. As of this date, the licensee began a period of apparent noncompliance with respect to the NRC license, which had specifically named RSO 1 on the license, and therefore required a license amendment to be submitted and approved naming a new individual to perform the RSO function.

2.3. September 30, 2017, through May 7, 2018

With the official departure of RSO 1, the licensee informally appointed another manager (hereafter "RSO 2") to provide oversight to the Materials Lab's use and storage of portable nuclear gauges. This individual was not officially named as RSO, or formally provided the responsibilities of RSO, but in-practice acted as RSO. RSO 2 informed the inspector that they had historical experience with portable nuclear gauges, however, that experience was more than 20 years prior to the subject period. In addition, RSO 2 stated that they had never completed any training to be an RSO.

RSO 2 also stated that they were only nominally providing oversight, such that if any issues, questions, or requests for resources were made from the Materials Lab, that RSO 2 would be the responsive manager, but RSO 2 would not be providing any day-to-day oversight of the use or storage of the portable nuclear gauges, as Gauge User 1 was experienced and knowledgeable with regard to the safety and security requirements associated with the use of the portable nuclear gauges. As a result of the above arrangements, MoA confirmed that RSO 2's involvement in the Materials Lab's safety program was minimal.

During this period of time, Gauge User 1 completed a third-party provided RSO training course, with a certificate of completion dated January 26, 2018. Through interviews with management and staff, the inspector discerned that the Gauge User 1 was not appointed to the supervisory position of RSO as a result of their staff-level position rendering him or her ineligible by MoA's internal policies and procedures (not the NRC's) to perform those responsibilities tied to the RSO position.

2.4. May 7, 2018, Hiring of Replacement Radiation Safety Officer

On May 7, 2018, MoA hired a replacement for the position of RSO. This individual (hereafter "RSO 3") had historical portable nuclear gauge experience from many years prior to the subject timeline. Specifically, RSO 3 was initially certified for use of nuclear portable gauges on July 15, 1987, by completion of a third-party nuclear safety course.

2.5. May 7, 2018, through Inspection Date – August 28-29, 2019

Following the licensee's hiring of RSO 3, the individual registered on January 2, 2019, for formal RSO training, along with several other courses, via a third-party online course. As of the date of the inspection on August 28-29, 2019, these courses had not yet been completed.

3. Observations and Findings

The August 28-29, 2019, unannounced routine inspection reviewed the licensee's use and storage of the portable nuclear gauges possessed under the NRC license. These included the safe use of the portable gauges, such as transportation, and security of the materials during transport, use, and storage of the portable nuclear gauges. During these reviews, five apparent violations were identified with respect to NRC regulatory requirements or license conditions.

Of the six portable nuclear gauges described in Section 1.1, the first four devices were current with annual leak tests, with the most recent leak tests having been completed on December 12 and 13, 2018, which showed no evidence of contamination or leaking. The final two devices (both Troxler Model 3241-C) were in storage and had not been used in at least five years. These devices had leak tests completed on December 20, 2016, with no signs of leakage or contamination. Under License Condition 13 of NRC License 50-15852-02, sealed sources that are in storage and not being used need not be leak tested for a period of up to 10 years, and therefore the final two Troxler devices remained in compliance by their lack of use following the most recently completed leak test.

The inspector observed the portable nuclear gauges, all of which were in storage at the beginning of the inspection on August 29, 2019, and determined that they were secured with two independent physical controls that formed tangible barriers. The physical controls were provided by a locked room with a locked metal cabinet within which the gauges were stored. On the first day of the inspection, August 28, 2019, no individuals were available at the licensee's facilities who had access to the Materials Lab portable nuclear gauge storage area.

The licensee had a single active gauge user at the time of the inspection (Gauge User 1), although the licensee had a second user in the 2016-2018 timeframe. Gauge User 1 demonstrated the blocking and bracing of a portable nuclear gauge in the Gauge User 1's principle work truck. The portable nuclear gauge was stored within a custom-built metal box that was secured shut with a padlock, inside which the portable nuclear gauge was further secured by a metal plate and a padlock from removal. These measures provided both adequate blocking and bracing and two independent physical controls for the gauges during transport and storage at temporary job sites.

3.1. Apparent Violation 1: License Condition 12

The licensee had an apparent failure to have the individual authorized on NRC Materials License 50-15852-02 fulfilling the duties and responsibilities of the RSO. The timeline for this apparent noncompliance was described in Section 2. The apparent violation is described below:

License Condition 12 of NRC Materials License 50-15852-02, Amendment No. 5, dated September 15, 2011, authorized a named individual as the RSO for the license.

Contrary to the above, from September 30, 2017, to August 29, 2019, the licensee failed to have the individual named on the license as the RSO. Specifically, the RSO listed on the license retired on September 30, 2017, and the license was not amended to name a new RSO who would fulfill the duties and responsibilities of the RSO by the time of the inspection in August 2019. (030-20410/2019-001-01)

3.2. Apparent Violation 2: Physical Inventories

In accordance with License Condition 15 of NRC License 50-15852-02, the licensee was required to conduct physical inventories every 6 months to account for all sources and/or devices possessed under the license. During the inspectors review of this requirement, the inspector determined that this activity had been inadequately implemented during the transitional period under RSO 1 prior to RSO 1's departure, and during the period that followed.

The licensee conducted formal documented inventories on June 23, 2015, July 5, 2016, December 20, 2016, September 27, 2017, and December 13, 2018. Given that the gaps between some of these inventories were in excess of 6 months, the inspector attempted to identify other activities that may account for the gauges in an equivalent manner to a physical inventory. Generally, these included the conduct of leak tests, calibrations, or documented use of the portable nuclear gauges.

As a result of the licensee's gauges' leak test frequency requirements, in combination with the seasonality of the calibration and the lack of use of the two Troxler Model 3241-C, the licensee failed to account for all gauges at least every 6 months as required. This noncompliance was determined to be an apparent violation and is described below:

License Condition 15 of NRC Materials License 50-15852-02, Amendment No. 5, dated September 15, 2011, requires, in part, the licensee to conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license.

Contrary to the above, from June 23, 2015, and August 29, 2019, the licensee failed to conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Specifically, between the above dates the licensee conducted five documented physical inventories, however the time periods between the physical inventories were in excess of the required 6 months, and for at least two portable nuclear gauges, no other means of physical verification could be established (e.g. leak tests, calibration, or use). (030-20410/2019-001-02)

3.3. Apparent Violation 3: 49 CFR 172.202(a)(1)

During the inspector's review of the licensee's transportation of the radioactive material, which was classified as Class 7 (radioactive) hazardous material under U.S. Department

of Transportation (DOT) regulations, the inspector reviewed the licensee's shipping papers. The shipping papers correctly described the licensee's hazardous materials, with the exception of the United Nations (UN) Identification Number, which used the old UN2974 to describe the radioactive material. This UN Identification Number was changed over 15 years ago during a revision of U.S. DOT regulations. The licensee's portable nuclear gauges were UN3332: Type-A Package, Special Form, Non-Fissile or Fissile Excepted Radioactive Material. The inspector's review determined that this noncompliance existed since at least the date of the last NRC inspection performed on November 4, 2014.

The failure to describe the radioactive material using the correct UN Identification Number on the licensee's shipping papers was identified as an apparent violation, and is described below:

10 CFR 71.5(a) requires, in part, that each licensee who transports licensed material outside of 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 U.S. DOT regulations in 49 CFR Parts 107, 171 through 180, and 390 through 397, appropriate to the mode of transport.

49 CFR 177.817(a) requires, in part, that a person may not accept a hazardous material for transportation or transport a hazardous material by highway unless that person has received a shipping paper prepared in accordance with 49 CFR Part 172.

49 CFR 172.202(a)(1) requires, in part, that the licensee's shipping paper must include a shipping description of the hazardous material, including the identification number prescribed for the material as shown in Column (4) of the 49 CFR 172.101 table.

Contrary to the above, from November 4, 2014, through August 29, 2019, the licensee failed to prepare shipping papers that included a shipping description of the hazardous material, including the identification number prescribed for the material as shown in Column (4) of the 49 CFR 172.101 table. Specifically, the licensee's shipping papers included a UN Identification Number (UN2974) that was incorrect, and the Type-A Package, Special Form, Non-Fissile or Fissile-Excepted Radioactive Material was UN3332. (030-20410/2019-001-03)

3.4. Apparent Violation 4: License Condition 21.B

The inspector reviewed the licensee's Operating and Emergency Procedures. The procedures were not those the licensee committed to using in the September 21, 2011, license renewal application. Specifically, the licensee committed during the license renewal in September 2011, to use the NRC's Model Procedures contained in Appendix H of NUREG-1556, Volume 1, Revision 1. This commitment was tied to the NRC license in License Condition 21.B, as of Amendment No. 5 of the license. The inspector's review determined that these procedures likely were in use since at least the previous NRC inspection on November 4, 2014.

The inspector reviewed the contents of the licensee's procedures and determined that they differed substantially from the Model Procedures committed to on the license. In

particular, the licensee's procedures were mostly limited to emergency procedures, which were neither as descriptive nor as broad as those contained in the Model Procedures. In addition, the Model Procedures describe at length 'operating' procedures, such as occasions for securing the portable gauge with two physical controls, the use of a gauge utilization log, and other items that were not covered in the procedures that licensee produced at the time of the inspection.

Partly as a result of the failure to use the Model Procedures, the licensee was not adequately documenting the use of the portable nuclear gauges as described in the Model Procedures, sometimes referred to as a 'use log' or 'utilization log.' While the licensee could produce post-job records showing where portable nuclear gauges were used and by whom, these were not recorded at the time of removal and return of the gauges as would be required by the use of a utilization log.

As a result of the above observations, an apparent violation of NRC license requirements was identified and is described below:

License Condition 21.B of NRC Materials License 50-15852-02, Amendment No. 5, dated September 15, 2011, 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 September 2, 2011.

The application dated September 2, 2011, requires, in part, that the licensee implement and maintain the "Operating, Emergency and Security Procedures" described in the errata sheet to Appendix H of NUREG-1556, Volume 1, Revision 1, and provide copies of these procedures to all gauge users and each job site.

Contrary to the above, from November 4, 2014, to August 29, 2019, the licensee failed to implement and maintain the "Operating, Emergency and Security Procedures" described in the errata sheet to Appendix H of NUREG-1556, Volume 1, Revision 1, and provide copies of these procedures to all gauge users and each job site. Specifically, the licensee maintained an alternative set of procedures that was substantially different to the procedures describe above. (030-20410/2019-001-04)

3.5. Apparent Violation 5: 10 CFR 20.1101(c)

Following the inspector's observations and findings described above in Sections 3.1 to 3.4, the inspector reviewed the licensee's conduct of self-reviews of its radiation protection program, as required by 10 CFR 20.1101(c). During the interviews with licensee personnel, principally RSO 3 and Gauge User 1, records were identified for prior audits the licensee had conducted of itself. These audits were performed on October 28, 2015, and October 19, 2016. Given the findings identified above in Sections 3.1 to 3.4, these audits failed to identify at least three of the apparent violations, but otherwise were observed to be reasonably comprehensive and detailed.

The inspector concluded that the licensee had not conducted any self-reviews of the program in 2017. Since RSO 2 was no more than minimally involved in the program, and not knowledgeable about program-level requirements for the Materials Lab, RSO 2

had neither conducted nor directed that a self-review be conducted during their brief oversight of the program.

As a result of the above observations, an apparent violation of NRC regulatory requirements was identified and is described below:

10 CFR 20.1101(c) requires that the licensee periodically (at least annually) review the radiation protection program content and implementation.

Contrary to the above, from January 1, 2017, through February 12, 2019, the licensee failed to periodically (at least annually) review the radiation protection program content and implementation. (030-20410/2019-001-05)

4. Corrective Actions

During the inspection, the licensee immediately addressed or provided commitments to the apparent noncompliances identified. The immediate corrective actions included: (1) conducting a physical inventory with the inspector of all specifically-licensed radioactive material possessed (i.e. the inventory excluded the generally-licensed self-luminous tritium exit signs); (2) providing immediate training on and copies of the applicable procedures to Gauge User 1; and (3) correcting the UN Identification Number for shipments of hazardous materials on the template shipping papers.

Following the inspection, the licensee submitted an amendment request in a letter dated October 18, 2019, to name the new Radiation Safety Officer on the license following that individual's completion of formal qualification training. Finally, the licensee committed to completing a follow-up self-audit and formal inventories prior to the end of the calendar year.

5. Exit Meeting Summary

At the conclusion to the on-site inspection, the inspector provided the preliminary inspection findings to on-site management. The licensee was represented at the preliminary exit meeting by Mr. Russel H. Oswald, Project Manager, P.E., L.S., and Mr. Timothy D. Huntting, P.E., Geotechnical Lab Manager.

On December 10, 2019, the NRC and MoA conducted a final telephonic exit briefing. Municipality of Anchorage was represented by Ms. Radvansky, Mr. Huntting, and Mr. Oswald.

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

Russel H. Oswald, P.E., L.S., Project Manager, Project Management & Engineering Department
Timothy D. Huntting, P.E., Geotechnical Lab Manager
Austin Lavy, Gauge User

INSPECTION PROCEDURES USED

87124 – Fixed and Portable Gauge Programs

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

030-20410/2019-001-01	AV	Failure to have the individual authorized on U.S. Nuclear Regulatory Commission Materials License 50 16084 01 fulfilling the duties and responsibilities of the radiation safety officer. (License Condition 12)
030-20410/2019-001-02	AV	Failure to perform physical inventories every 6 month. (License Condition 15)
030-20410/2019-001-03	AV	Failure to use a correct UN Identification Number for hazardous materials description for U.S. DOT shipping papers. (10 CFR 71.5(a), 49 CFR 172.202(a)(1))
030-20410/2019-001-04	AV	Failure to implement the NRC's Model Operating and Emergency Procedures committed to during the 2011 license renewal process. (License Condition 21.B)
030-20410/2019-001-05	AV	Failure to perform annual reviews of the radiation protection program. (10 CFR 20.1101(c))

Closed

None

Discussed

None

LIST OF ACRONYMS USED

ADAMS	Agencywide 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
MoA	The Municipality of Anchorage, Public Works Department
NRC	U.S. Nuclear Regulatory Commission
PEC	Pre-decisional Enforcement Conference
RSO	Radiation Safety Officer
UN	United Nations