



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

December 30, 2020

EA-20-113

Mr. Avinash Rachmale, P.E.  
Chief Executive Officer  
LGC Global Corporation  
7310 Woodward Avenue  
Detroit, MI 48202

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION INSPECTION

Dear Mr. Rachmale:

On July 22 and 24, 2019, and September 19, 2019, an inspector from the U.S. Nuclear Regulatory Commission (NRC) conducted a non-routine inspection at your Highland Park, Michigan field office and at your main office in Detroit, Michigan. This inspection included continued in-office review through November 30, 2020. The purpose of the inspection was to verify the continued safe and secure storage of two moisture density gauges, each containing a nominal 5.5-millicurie radium-226 sealed source, and two hand-held x-ray analyzers, one containing a 4.5-millicurie americium-241 sealed source and one containing a 40-millicurie cadmium-109 sealed source. Lakeshore Toltest Corporation was part of a Chapter 7 bankruptcy filed on or about May 2, 2014, and its license expired on October 31, 2020. As part of the bankruptcy, all four devices were transferred to LGC Global Corporation (LGC Global). The two moisture density gauges had been possessed at the Highland Park field office under NRC license 34-35052-01 (docket 030-38628) issued to Lakeshore Toltest Corporation. The NRC did not receive a license application from LGC Global for possession of these devices prior to LGC Global assuming possession of the devices. No request to renew the license, or to transfer the license to LGC Global, had been received by the NRC prior to the license expiration date. The two x-ray analyzers had been possessed at the field office by Lakeshore Toltest Corporation under a general license. However, the material in the analyzers may only be used or possessed in accordance with a specific or general license. Because the analyzers were not properly transferred to LGC Global, in accordance with Title 10 of the *Code of Federal Regulations* (CFR) 31.5(b)(2), the general license granted by 10 CFR 31.5 does not apply. The NRC has not granted LGC Global a specific license for use or possession of this material. Therefore, based on the results of this inspection, the NRC has identified that LGC Global is in possession of radioactive material without an NRC license, an apparent violation of 10 CFR 30.3, "Activities requiring license."

This apparent violation 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>. During our inspection, we verified the continued safe storage of the two radium-226 gauges, but could not verify the safe and secure storage of the two hand-held x-ray analyzers because your staff could not locate the keys to the cabinet in which they stated the devices were stored. On November 30, 2020, Ms. Deborah A. Piskura, the senior NRC inspector who conducted the inspection, discussed with Ms. Carmen Hernandez of your staff the apparent violation and the need for you to take prompt corrective actions.

The failure to obtain an NRC license prior to possessing radioactive material and the continued possession of that material without a license is significant because LGC Global does not have an approved program of compliance to assure safe and secure handling of the material, and the failure to obtain an NRC license impacts the NRC's ability to meet its regulatory responsibility to the public. The NRC has attempted on numerous occasions since May 2014 to contact you and provide you with information on obtaining an NRC license for the possession of the radioactive material. During our past attempted communications, both while you were employed by Lakeshore Toltest Corporation and now by LGC Global, your representative stated that either a license application for the radioactive material would be submitted or the material would be transferred for disposal. However, you have neither submitted an application for a new license nor provided assurance to demonstrate that you have transferred the devices to an authorized recipient for disposal or use.

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.

As identified in the NRC Enforcement Policy and to emphasize the importance of compliance with NRC requirements to either ensure proper transfer or disposal of unauthorized radioactive material in your possession or file an application for and obtain an NRC license, the NRC can issue civil penalties in amounts that can range from a one-time base penalty amount up to and including daily civil penalty amounts. According to the NRC Enforcement Policy, the base civil penalty for the apparent violation at LGC Global would be \$7,500. The NRC will consider not imposing the civil penalty if, within 60 days of the date of this letter, LGC Global provides the NRC with appropriate documentation that it has properly disposed of or transferred all of the devices containing radioactive sealed sources, or requested and received an NRC license. However, if LGC Global does not establish compliance, the NRC will consider the imposition of a civil penalty, including daily penalties that can continue to be assessed until you address the violation.

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; (2) request a Predecisional Enforcement Conference (PEC); or (3) request Alternative Dispute Resolution (ADR). **Please contact Mr. Michael Kunowski at 630-829-9618 or Michael.Kunowski@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 NRC Inspection Report No. 2019001(DNMS); EA-20-113" 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.

If you request a PEC, the conference 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, it will be open for public observation and the NRC will issue a press release to announce the time and date of the conference.

In lieu of a PEC, you may request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a third party neutral. 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 the apparent violation 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 "Rules of Practice," a copy of this letter, its enclosure, and your response, will be made 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>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made publicly available without redaction.

Please feel free to contact Deborah A. Piskura of my staff if you have any questions regarding this inspection. Ms. Piskura can be reached at 630-829-9867.

Sincerely,

David L. Pelton, Director  
Division of Nuclear Materials Safety

Enclosure:  
IR No. (NON-LICENSEE)/2019001(DNMS)

cc w/enc: State of Michigan

Letter to Avinash Rachmale from David Pelton dated December 30, 2020.

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION INSPECTION

DISTRIBUTION w/encl:

RidsSecyMailCenter  
 OCADistribution  
 Margaret Doane  
 Darrell Roberts  
 George Wilson  
 Francis Peduzzi  
 Juan Peralta  
 Jack Giessner  
 Kenneth O'Brien  
 David Lew  
 Laura Dudes  
 Scott Morris  
 Brooke Clark  
 Mauri Lemoncelli  
 John Lubinski  
 Robert Lewis  
 Michele Burgess  
 Robert Sun  
 Sophie Holiday  
 Brian Holian  
 Tracy Prasad  
 Carl Grigsby  
 Raymond McKinley  
 Mark Kowal

Jeremy Groom  
 Jamnes Cameron  
 Doug Dodson  
 Holly Harrington  
 David Lee  
 Andy Shuttleworth  
 Meghan Blair  
 Jessie Quichocho  
 Aida Rivera-Varona  
 David Pelton  
 Aaron McCraw  
 Michael Kunowski  
 Robert Ruiz  
 MIB Inspectors  
 Herral Logaras  
 Darren Piccirillo  
 Viktoria Mitlyng  
 Prema Chandrathil  
 Kenneth Lambert  
 Paul Pelke  
 Sarah Bakhsh  
 RidsOemailCenter Resource

**ADAMS Accession Number: ML20364A250**

OFFICE	RIII DNMS	E	RIII DNMS	E	RIII EICS	E	NMSS	E
NAME	DPiskura:ps dap		MKunowski mak		JCameron		CEinberg/MBurgess	
DATE	12/14/2020		12/15/2020		12/29/2020		12/29/2020	
OFFICE	RIII-RC	E	OE	E	OGC	E	RIII DNMS	E
NAME	SLewman		JPeralta		LBaer		DPelton	
DATE	12/18/2020		12/29/2020		12/29/2020		12/30/2020	

**OFFICIAL RECORD COPY**

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

Report No.: (NON-LICENSEE)/2019001(DNMS)

EA No.: EA-20-113

Non-Licensee: LGC Global Corporation

Facilities: 385 Midland  
Highland Park, Michigan

7310 Woodward Avenue  
Detroit, Michigan

Inspection Dates: July 22 and 24, 2019, and September 19, 2019,  
with continued in-office review through  
November 30, 2020

Exit Meeting Date: November 30, 2020

Inspector: Deborah A. Piskura, Senior Health Physicist

Approved By: Michael A. Kunowski, Chief  
Materials Inspection Branch  
Division of Nuclear Materials Safety

Enclosure

## **EXECUTIVE SUMMARY**

### **LGC Global Corporation NRC Inspection Report (non-licensee)/2019001(DNMS)**

A non-routine inspection of LGC Global Corporation (LGC Global) was conducted from July 2019 – November 2020. LGC Global, located near Detroit, Michigan, possesses two portable moisture density gauges containing radium-226 and two hand-held x-ray analyzers, one containing americium-241 and one containing cadmium-109. These four devices were previously possessed at the same location by Lakeshore Toltest Corporation, a former NRC licensee. Lakeshore Toltest Corporation dissolved after filing for Chapter 7 bankruptcy in May 2014 and, therefore, no longer exists as an operating business entity. The NRC license issued to Lakeshore Toltest Corporation before it was dissolved expired on October 31, 2020. The inspector identified an apparent violation of Title 10 of the *Code of Federal Regulations* (CFR) 30.3 by LGC Global for the possession of the four devices without an NRC license.

## **REPORT DETAILS**

### **1 Background and Early Inspection History**

LGC Global Corporation (LGC Global) is a private company that was formed in around May 2014. It specializes in construction, and infrastructure and facility management. The CEO of LGC Global formerly served as a company executive for Lakeshore Toltest Corporation (NRC License No. 34-35052-01, Docket No. 030-38628, expiration date October 31, 2020), which filed for Chapter 7 bankruptcy on or about May 2, 2014. Lakeshore Toltest Corporation was formed in 2013 with the merger of a former NRC licensee, Lakeshore Engineering Services, Inc. (NRC License No. 21-32802-01, Docket No. 030-38325) and Toltest, Inc. (an Ohio Agreement State licensee). This merger required a license to be issued to Lakeshore Toltest Corporation, authorizing the possession of the two portable moisture density gauges (each gauge containing a nominal 5.5-mCi radium-226 sealed source) previously owned by Lakeshore Engineering Services, Inc.; the authorized location of storage for the gauges was at the former company's field office in Highland Park, Michigan. Note that Lakeshore Engineering also possessed two generally licensed x-ray analyzers (one device containing a nominal 40-mCi cadmium-109 source and one device containing a nominal 4.5-mCi americium-241 source) which were included in the merger of assets. While the location of use and storage for the gauges remained the same on the new license for Lakeshore Toltest Corporation from the now terminated license for Lakeshore Engineering Services, the address on the license was now near Toledo, Ohio, instead of near Detroit. Sometime after the filing of the bankruptcy, Lakeshore Toltest Corporation ceased to exist as an operating business entity.

In January 2014, the NRC conducted the initial inspection of the activities authorized under the new license issued (on June 4, 2013) to Lakeshore Toltest Corporation. One Severity Level IV violation of NRC requirements was identified involving the failure to provide training to hazmat employees as required by 10 CFR 71.5(b) and Subpart H to 49 CFR 172.702. On June 25, 2014, in response to the bankruptcy filing in May 2014, the NRC conducted a special inspection at the Highland Park, Michigan field office to verify the security of the portable gauges and the two generally licensed analyzers. No violations of NRC requirements were identified during this inspection.

### **2 Post-Bankruptcy Activities and Possession of Byproduct Material Without an NRC License**

#### **2.1 Inspection Scope**

Following the May 2014 filing, the NRC monitored the progress of the bankruptcy and occasionally spoke with legal representatives for Lakeshore Toltest Corporation. The NRC also provided information to the former executive of Lakeshore Toltest Corporation (who is now the current CEO of LGC Global) on the new license application process (NUREG 1556, Vol. 1 and NRC Form 313). Over the years, repeated efforts were required by the NRC to contact Lakeshore Toltest Corporation personnel.

In 2019, an NRC inspector conducted onsite inspections to verify the safety and security of the radioactive material and to discuss with senior officials the status of the bankruptcy and any action on applying for a new license. The inspector interviewed

select staff and reviewed records related to the Lakeshore Toltest Corporation license and the bankruptcy filing and toured the field office, now owned and operated by LGC Global.

## 2.2 Observations and Findings

On July 22 and 24, 2019, the inspector conducted an on-site inspection at the Highland Park, Michigan field office. Upon arrival at the field office, the inspector noted a new company name logo, "LGC Global" on the building sign. The company staff confirmed that they possessed the two radium gauges and the two x-ray analyzers. The inspector attempted to meet with the CEO of the LGC Global but was informed that he was unavailable. Subsequent numerous attempts by the inspector to call the CEO or other management representatives were unsuccessful with the call transferred to voice mail (including mailbox full notification).

On September 19, 2019, the inspector re-visited the LGC Global field and corporate offices to discuss the July inspection findings with a senior company representative. The inspector was directed to and met with the Human Resources (HR) Manager and discussed the inspection findings and the need to amend the license to reflect the correct entity and mailing address (the address on the license for Lakeshore Toltest Corporation was near Toledo, Ohio; LGC Global is not associated with that address). Between January and July 2020, the inspector called and emailed the HR Manager on a number of occasions. During these contacts, the inspector discussed the licensing process and disposal options should the company decide to divest itself of its licensed material. In January, the HR Manager informed the inspector that according to her conversations with senior management, the company decided to divest itself of its gauges. In June 2020, the HR Manager informed the inspector that the senior management changed their position on disposal of the devices due to cost. Subsequent attempts by the inspector to contact LGC Global staff in July and August 2020 were unsuccessful. On October 31, 2020, Lakeshore Toltest Corporation's NRC license authorizing possession of radioactive material at the Highland Park location expired. LGC Global did not seek to amend that license or obtain a new license to reflect its possession of that radioactive material.

Title 10 CFR 30.3(a) requires, in part, that no person transfer, receive, own, possess, or use byproduct material except as authorized in a specific or general license issued in accordance with the regulations in this chapter.

Title 10 CFR 31.5(b)(2) requires, in part, that for the general license to apply to possession of a device, the device must have been received from a specific licensee whose license authorizes the distribution of the device as a generally licensed device, or through a transfer made under 31.5 (c)(9).

Title 10 CFR 31.5(c)(9) requires, in part, that any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to the general license shall transfer the device to another general licensee only if within 30 days of the transfer, the transferor (i.e., Lakeshore Toltest Corporation) report to the Director, Office of Nuclear Materials Safety and Safeguards: (A) the model number and the serial number of the device transferred; (B) the model number and the serial number of the device transferred; (C) the transferee's name (i.e., LGC Global) and mailing address for the location of use; and (D) the name, title, and phone number of the responsible

individual identified by the transferee. Alternatively, the general licensee (i.e., Lakeshore Toltest Corporation) could transfer its generally licensed devices to an NRC licensee with specific authorization under the provisions of 10 CFR 30.3(a) to possess these devices.

LGC Global is required to have a specific license under 10 CFR 30.3(a) for the two radium gauges. Additionally, because Lakeshore Toltest Corporation had not properly transferred the two generally licensed x-ray analyzers according to 10 CFR 31.5(c)(9) nor did it have a specific license to distribute generally licensed devices, in order to possess the regulated material in the x-ray analyzers, LGC Global is required to have a specific license under 10 CFR 30.3(a). LGC Global's failure to have an NRC license for the possession of the two portable radium gauges and the two x-ray analyzers is an apparent violation of 10 CFR 30.3(a). To date, LGC Global has not applied for and received a specific license from the NRC for the possession of the four devices containing radioactive material. Moreover, it has not properly transferred or disposed of those devices.

### 2.3 Conclusions

One apparent violation of NRC requirements in 10 CFR 30.3(a) was identified during this inspection. Since approximately May 2014, LGC Global possessed and stored two portable gauges containing radium-226 sources and two x-ray analyzers containing cadmium-109 and americium-241 sources without an NRC license. LGC Global has taken no actions to address this matter, such as applying for and receiving a specific license from the NRC or divesting itself of its radioactive material through transfer to an authorized recipient for use or disposal.

## 3 **Security of Portable Gauges**

### 3.1 Inspection Scope

During her inspection in 2019, the inspector toured LGC Global's field office in Highland Park, Michigan, and observed the company's method of securing the portable gauges in the storage room. The inspector also interviewed an employee of LGC Global who had been authorized to use the gauges under the Lakeshore Toltest Corporation license.

### 3.2 Observations and Findings

LGC Global stored the two portable radium gauges in a normally locked storage room (each gauge in its transportation case), shared with other construction equipment. Each gauge case was wrapped with two criss-crossed chains secured by padlocks and the two cases were stored on a shelving unit in the room. However, the cases were not otherwise secured from removal, such as the cases being chained to the shelving unit or some other substantial structure in the room.

Title 10 CFR 30.34(i) requires that each portable gauge licensee 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. The means used by LGC Global to secure the gauges did not meet this "two-barrier" requirement. If the locked door had been left unlocked, there

would have been no second barrier preventing the unauthorized removal of one or both gauges in their cases from the room.

Because 10 CFR 30.34 pertains to terms and conditions of licenses and LGC Global does not have a license, there is no violation of 10 CFR 30.34 for how the gauges were secured. However, following a discussion by the inspector with LGC Global personnel, LGC Global reconfigured the chains and padlocks to secure the gauge cases within the storage room to establish a second barrier. When the inspector re-visited the field office on July 24, 2019, and September 19, 2019, she confirmed that the gauges remained properly secured.

### 3.3 Conclusions

The inspector identified that LGC Global had not used a minimum of two independent physical controls that form tangible barriers to secure the two portable gauges, when the gauges were not under control and constant surveillance. LGC Global subsequently reconfigured the chains and locks to properly secure the gauges within the storage room. No violation of NRC requirements was identified because the specific requirement pertains to NRC licensees.

## 4 **Other Areas Inspected**

### 4.1 Inspection Scope

The inspector reviewed other aspects of the radiation protection program established by Lakeshore Toltest Corporation, which included training for gauge users, sealed source leak tests, labeling of containers, and postings. The inspector interviewed selected individuals, toured the facilities, and examined the portable gauges.

### 4.2 Observations and Findings

The inspector determined that the appropriate training had been provided to all authorized gauge users through a program sponsored by the device manufacturer or a service firm. Active gauge users attended DOT Hazmat training within three years from the last use of portable gauges; LGC Global had maintained copies of all training certificates. Through interviews, the inspector determined that the knowledgeable staff understood the service and disposal requirements for the gauges.

The inspector examined the two portable gauges in LGC Global's possession. Each gauge unit was noted to bear a clearly visible label identifying the radionuclides and source activities. A knowledgeable individual/gauge user at the field office continued to perform sealed source leak tests of the gauges every six months as authorized under the device manufacturer's sealed source and device registration. The inspector observed that a copy of NRC Form 3 was posted in LGC Global's facility. The inspector also observed that the room where the gauges were stored was appropriately posted with a "CAUTION-RADIOACTIVE MATERIALS" sign.

The inspector was unable to view the two hand-held x-ray analyzers in LGC Global's possession. During the previous special inspection in June 2014, the inspector confirmed the presence of the then generally licensed x-ray analyzers. A former gauge user recalled that the analyzers were stored in a locked cabinet at LGC Global's (and

formerly Lakeshore Toltest Corporation's) Highland Park, Michigan field office. However, the knowledgeable individual could not locate the keys to the cabinet for the inspector to confirm the possession of these units.

#### 4.3 Conclusions

Based on record reviews, interviews with personnel, and the observations described above, the inspector identified no violations of NRC requirements that were applicable to the Lakeshore Toltest Corporation license. The inspector could not verify the safe and secure storage of the formerly generally licensed x-ray analyzers that an LGC Global representative stated the company possesses.

#### 5 **Exit Meeting**

The NRC inspector presented preliminary inspection findings following the onsite inspection on September 19, 2019. The LGC Global representative did not identify any documents or processes reviewed by the inspector as proprietary. The representative acknowledged the findings presented. The NRC held a final exit meeting telephonically with the company representative on November 30, 2020. At this meeting, the inspector discussed the overall inspection scope and findings of the in-office review. The company representative acknowledged the inspector's findings. No proprietary information was identified.

#### **LIST OF PERSONNEL CONTACTED**

#\*Carmen Hernandez, Manager, Human Resources  
Mike Minor, Technician  
Sashidhar Shastri, Executive Vice President

Avinash Rachmale, P.E., Chief Executive Officer

# Attended preliminary on-site exit meeting on September 19, 2019

\* Individual contacted by phone on November 30, 2020, for final exit teleconference

#### **INSPECTION PROCEDURES USED**

IP 87103 Inspection of Materials Licensees Involved in an Incident or Bankruptcy Filing  
IP 87124 Fixed and Portable Gauge Programs