



A CMS Energy Company

135 West Trail Street  
Jackson, MI 49201

October 13, 2017


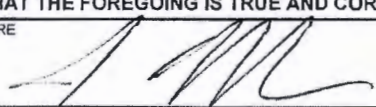
Ms. Forster,

This letter is in regard to the NRC Form 314 requesting the termination of license # 21-18784-01 which you received on August 10, 2017. I am confirming that the sources listed on the Form 314 (five Agilent Model G2397A sealed sources) are the only sources possessed under the above mentioned license. There have been no changes since the request for termination was submitted. Enclosed are the documents originally submitted: the Form 314, general License Registration Form, latest source inventory, latest leak test results, and a photo of the tag attached to each source housing stating they are "subject to a General License."

Thank you for your time,

A handwritten signature in black ink, appearing to read "J. Merrill".

**John S. Merrill**  
Radiation Safety Officer  
Environmental Health & Safety  
Laboratory Services Department  
O: 517-788-7104 | C: 517-740-1953

<b>NRC FORM 314</b> (02-2017) 10 CFR 30.36(j)(1); 40.42(j)(1); 70.38(j)(1); and 72.54(k)(5)(1)(i)	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>    <b>CERTIFICATE OF DISPOSITION OF MATERIALS</b>	<b>APPROVED BY OMB: NO. 3150-0028</b>  <small>Estimated burden per response to comply with this mandatory collection request: 30 minutes. This submittal is used by NRC as part of the basis for its determination that the facility is released for unrestricted use. Send comments regarding burden estimate to the FOIA, Privacy, and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to <a href="mailto:InfoCollects.Resource@nrc.gov">InfoCollects.Resource@nrc.gov</a>, and to the Desk Officer, Office of Information and Regulatory Affairs, NE09-10202, (3150-0028), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.</small>	<b>EXPIRES: 02/29/2020</b>
<b>LICENSEE NAME AND ADDRESS</b>  Consumers Energy Laboratory Services 135 W. Trail St. Jackson MI 49201	<b>LICENSE NUMBER</b>  21-18784-01	<b>DOCKET NUMBER</b>  	
		<b>LICENSE EXPIRATION DATE</b>  September 30, 2010	
<b>A. LICENSE STATUS (Check the appropriate box)</b>			
<input checked="" type="checkbox"/> This license has expired. <input type="checkbox"/> This license has not yet expired; please terminate it.			
<b>B. DISPOSAL OF RADIOACTIVE MATERIAL</b> <i>(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)</i>			
The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:			
<input type="checkbox"/> 1. No radioactive materials have ever been procured or possessed by the licensee under this license.			
<input type="checkbox"/> 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner.			
<input type="checkbox"/> a. Transfer of radioactive materials to the licensee listed below:			
This license only possesses 5 Ni-63 sealed sources (<15mCi each) that were sold to us by Agilent as General License			
<input type="checkbox"/> b. Disposal of radioactive materials:			
<input type="checkbox"/> 1. Directly by the licensee:			
<input type="checkbox"/> 2. By licensed disposal site:			
<input type="checkbox"/> 3. By waste contractor:			
<input type="checkbox"/> c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.			
<b>C. SURVEYS PERFORMED AND REPORTED</b>			
<input type="checkbox"/> 1. A radiation survey was conducted by the licensee. The survey confirms:			
<input type="checkbox"/> a. the absence of licensed radioactive materials			
<input type="checkbox"/> b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.			
<input type="checkbox"/> 2. A copy of the radiation survey results:			
<input type="checkbox"/> a. is attached; or <input type="checkbox"/> b. is not attached (Provide explanation); or <input type="checkbox"/> c. was forwarded to NRC on: _____ Date _____			
<input checked="" type="checkbox"/> 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and			
<input checked="" type="checkbox"/> a. The results of the latest leak test are attached; and/or <input checked="" type="checkbox"/> b. No leaking sources have ever been identified.			
The person to be contacted regarding the information provided on this form:			
<b>NAME</b> John Merrill	<b>TITLE</b> Radiation Safety Officer	<b>TELEPHONE (Include Area Code)</b> (517)740-1953	<b>E-MAIL ADDRESS</b> <a href="mailto:john.merrill@cmsenergy.com">john.merrill@cmsenergy.com</a>
Mail all future correspondence regarding this license to: John Merrill RSO, Consumers Energy, 135 W. Trail St. Jackson MI 49201			
<b>C. CERTIFYING OFFICIAL</b> <b>I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT</b>			
<b>PRINTED NAME AND TITLE</b> John Merrill RSO	<b>SIGNATURE</b> 	<b>DATE</b> 8/10/2017	
<b>WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.</b>			

## CERTIFICATE OF DISPOSITION OF MATERIALS

PLEASE READ THESE INSTRUCTIONS BEFORE COMPLETING NRC FORM 314.

Subpart E of 10 CFR Part 20 establishes the radiological criteria for license terminations/decommissioning of facilities licensed under 10 CFR Parts 30, 40, 50, 60, 61, 70, and 72, as well as other facilities subject to the Commission's jurisdiction under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended.

### INSTRUCTIONS

#### Section B, Item 2.

Licensees should describe the specific radioactive material transfer actions. If radioactive wastes were generated in terminating this license, the licensee should describe the disposal actions taken, including the disposition of low-level radioactive waste, mixed waste, greater-than-Class-C waste, and sealed sources.

#### Section B, Item 2.a.

The information provided concerning the transfer of radioactive material to another licensee should specify the date of the transfer, the name of the licensee recipient, an individual contact name and telephone number for the licensee recipient, and the recipient's NRC or Agreement State license number.

#### Section B, Item 2.b.

For disposal of radioactive materials, licensees should describe the specific disposal method or procedure (e.g., decay-in-storage). For those cases when radioactive materials are disposed of by a licensed disposal site or by a waste contractor, the licensee should specify the name, address, and telephone number of the licensed disposal site operator or waste contractor.

#### Section B, Item 2.c.

"Residual radioactivity," as defined in 10 CFR 20.1003, means radioactivity in 'areas' (structures, materials, soils, etc.) remaining as a result of activities (licensed and unlicensed) under the licensee's control from sources used by the licensee, excluding background radiation. ALARA is defined in 10 CFR 20.1003.

### FILE CERTIFICATES AS FOLLOWS:

#### IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND CERTIFICATES TO:

LICENSING ASSISTANT SECTION  
NUCLEAR MATERIALS SAFETY BRANCH  
U.S. NUCLEAR REGULATORY COMMISSION, REGION I  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PA 19406-2713

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND CERTIFICATES TO:

MATERIALS LICENSING SECTION  
U.S. NUCLEAR REGULATORY COMMISSION, REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

#### IF YOU ARE LOCATED IN:

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND CERTIFICATES TO:

MATERIAL RADIATION PROTECTION SECTION  
U. S. NUCLEAR REGULATORY COMMISSION, REGION IV  
1600 E. LAMAR BOULEVARD  
ARLINGTON, TX 76011-4511



# GENERAL LICENSE REGISTRATION FORM

Note: For U.S. customers, Agilent Technologies, Inc. must have this certification on file before the Electron Capture Detector (ECD) will be sold or shipped. Please read and complete the information below, sign where indicated, and return as instructed by your Agilent representative (alternate numbers provided below). *Please note that the person designated as the End User must be the person identified by the General Licensee as having responsibility for having knowledge of the appropriate regulations and requirements and having the authority for taking required actions to comply with appropriate regulations and requirements as defined in NRC Regulation 10 CFR Section 31.5 (c) (12) (enclosed).*

The undersigned End User hereby certifies that he/she will adhere to the regulatory requirements in the enclosed NRC Regulations 10 CFR 20.2201, 20.2202, 30.51, 31.2, and 31.5. The undersigned also accepts responsibility for the operation and maintenance of the ECD in a safe manner lying beyond the manufacturer's control.

ECD Purchased: 7890A Micro-ECD

X 8/13 G-2397AD, G-2397-60610, G-3440A Option 231

6890 Micro-ECD

\_\_\_\_ Part numbers G2397A, G2397-60510, G1530N Option 231, or G1540N Option 231

6890 Standard ECD

\_\_\_\_ Part numbers G1533-60576, G1533-60660

5890 Series II and Series II Plus ECD

\_\_\_\_ Part number G1223A

6850 Series II Micro-ECD

\_\_\_\_ Part numbers G2397AB, G2630B Option 231

Note: NRC License # 21-18784-01

Please type or print legibly. Your order may be delayed if information is not legible.

Customer Purchase Order Number: G0520027

End User's Name: (Print) Gordon L. Cattell (Signature) Att. Lab

End User's Title: Sr. Technical Lab Analyst II Telephone Number: (717) 788-2334

Company Name (No abbreviations please): Consumers Energy Company

Address (No P.O. Boxes): Laboratory Services Date: 6-02-08

135 W. Trail St, Jackson, MI 49201

Agilent Only: Sales Order Number: \_\_\_\_\_

FAX this page only, once completed, to 302-633-8953

## SOURCE INVENTORY FORM

Detector Cell Serial Number	Total Quantity (mCi)	Type of Material	Cell Vendor & Model #	Location of Source	Physical Condition (✓)		Date of Source Check
					Satisfactory	Damaged	
U2965	15	Ni-63	Agilent G2397A	Agilent 6890 Gas Chromatograph	✓		7-25-17
U2970	15	Ni-63	Agilent G2397A	Agilent 6890 Gas Chromatograph	✓		7-25-17
U6226	15	Ni-63	Agilent G2397A	Agilent 6890 Gas Chromatograph	✓		7-25-17
U13551	15	Ni-63	Agilent G2397A	Agilent 7890 Gas Chromatograph	✓		7-25-17
U13552	15	Ni-63	Agilent G2397A	Agilent 7890 Gas Chromatograph	✓		7-25-17

Inventory Performed By:

M. J. G. Cotton

Reviewed By:

[Signature]

Date:

7-25-17



**QSA GLOBAL**

QSA Global Inc.  
6765 Langley Drive  
Baton Rouge, Louisiana 70809  
Tel: 225-751-5893  
Fax: 225-756-0365

CONSUMERS POWER/NDT SVC.  
ATTN: JOHN MERRILL  
135 W. TRAIL STREET  
JACKSON MI 49201

This is to advise results of the leak test samples received by QSA Global Inc.

Isotope	Serial number	Date of Test	Results
NI63	U2965-OUTLET	7/25/17	<.005uCi
NI63	U2965-HOUSING	7/25/17	<.005uCi
NI63	U13551-OUTLET	7/25/17	<.005uCi
NI63	U13551-HOUSING	7/25/17	<.005uCi
NI63	U2970-OUTLET	7/25/17	<.005uCi
NI63	U2970-HOUSING	7/25/17	<.005uCi
NI63	U13552-OUTLET	7/25/17	<.005uCi
NI63	U13552-HOUSING	7/25/17	<.005uCi
NI63	U6226-OUTLET	7/25/17	<.005uCi
NI63	U6226-HOUSING	7/25/17	<.005uCi

Analyzed by: JOHN RABALAIS

Date Analyzed: Jul-28-2017





**CAUTION**  
**RADIOACTIVE MATERIAL**  
**15 MILLICURIES OF NICKEL 63**

**G2397A ELECTRON CAPTURE DETECTOR**

SERIAL NO.

U13551

DATE

04 08

 **Agilent Technologies**



**SEE THE GC AND ECD MANUALS BEFORE  
OPERATING OR SERVICING THIS DEVICE.**

**THIS DEVICE MUST BE WIPE (RADIOACTIVE LEAK)  
TESTED AT INTERVALS NOT GREATER THAN SIX  
MONTHS.**

**THE RECEIPT, POSSESSION, USE AND TRANSFER  
OF THIS DEVICE ARE SUBJECT TO A GENERAL  
LICENSE OR THE EQUIVALENT, AND THE  
REGULATIONS OF THE U.S. NRC OR OF A STATE  
WITH WHICH THE NRC HAS ENTERED INTO AN  
AGREEMENT FOR THE EXERCISE OF REGULATORY  
AUTHORITY. OUTSIDE U.S., CONSULT THE  
APPROPRIATE AGENCIES TO DETERMINE THE  
EQUIVALENT REGULATIONS.**

**THE LABEL SHALL BE MAINTAINED ON THIS  
DEVICE IN A LEGIBLE CONDITION. REMOVAL OF  
THIS LABEL IS PROHIBITED.**

MADE IN U.S.A.

## Song, Taehoon

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**From:** Forster, Sara  
**Sent:** Friday, October 13, 2017 3:01 PM  
**To:** Song, Taehoon; Pavon, Sandy; Sandrik, Lauren  
**Subject:** FW: RE: Additional Information Request for Consumers Energy Company, NRC Lic. No. 21-18784-01, CN600426  
**Attachments:** License Termination.pdf

Please scan in and return to me. Thank you!!!

Sara x9892

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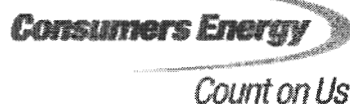
**From:** John S. Merrill [mailto:JOHN.MERRILL@cmsenergy.com]  
**Sent:** Friday, October 13, 2017 2:55 PM  
**To:** Forster, Sara <Sara.Forster@nrc.gov>  
**Subject:** [External\_Sender] RE: Additional Information Request for Consumers Energy Company, NRC Lic. No. 21-18784-01, CN600426

Attached are the documents originally submitted August 10, 2017 with a signed letter in compliance with the requirements listed below.

Please let me know if you have any further questions or if I need to Fax these as well.

Thank you,

**John S. Merrill**  
**Radiation Safety Officer**  
**Environmental Health & Safety**  
Laboratory Services Department  
O: 517-788-7104 | C: 517-740-1953



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**From:** Forster, Sara [mailto:Sara.Forster@nrc.gov]  
**Sent:** Thursday, October 5, 2017 10:51 AM  
**To:** John S. Merrill  
**Subject:** Additional Information Request for Consumers Energy Company, NRC Lic. No. 21-18784-01, CN600426

**Email sent from outside of CMS/CE. Use caution before clicking links/attachments.**

Dear Mr. Merrill:

We have reviewed your facsimile (ML17222A660, received August 10, 2017) requesting to terminate the above referenced license. As mentioned in my voice message, left earlier this morning, additional information is needed to complete our review. Accordingly, please provide additional information, as noted below:



1. In the request, there was an indication that the licensee only possesses five Agilent Model G2397A sealed sources, which were distributed under a general license. **Please confirm that these sources were the only sources possessed under the referenced license. In the alternative, please provide a history of all radioactive materials used or stored under the license, to include:**
  - The dates on which each source was received and dispositioned;
  - The radionuclide, final transfer and use dates, radioactive quantity, and final disposition for any sources used or stored under the license; and
  - Confirmation that the licensee still possesses the five sources referenced in the request.
2. In the application, the licensee included an inventory, source check, and leak test for each of the five sources possessed under the license. **Please resubmit the same information under a signed and dated letter and NRC Form 314.**
3. In the application, the NRC Form 314, "Certificate of Disposition of Materials," is not signed. **Please resubmit this form to include a signature of the Radiation Safety Officer (RSO) or other designated management official.**

In order to terminate this license, please submit requested information within 14 days (on or before October 19, 2017). If you are unable to respond by then, please let us know as soon as possible when you will be able to provide a response. Additional guidance may be found in NUREG 1556, Vol. 7, "Program Program-Specific Guidance about Academic, Research and Development, and Other Licenses of Limited Scope Including Gas Chromatographs and X-Ray Fluorescence Analyzers," which may be found at:

<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/v7/>

Submission of your response as a pdf file attached to an email or via facsimile will allow for the quickest processing. Any response must be submitted under a signed and dated cover letter. Do not hesitate to call me with any questions you may have, or if you will need additional time to complete your response.

Sincerely yours,

**Sara A. Forster, Health Physicist Licensing Reviewer**  
U.S. Nuclear Regulatory Commission - Region III  
Division of Nuclear Materials Safety  
2443 Warrenville Rd. - Ste. 210  
Lisle, IL 60532-4352  
[sara.forster@nrc.gov](mailto:sara.forster@nrc.gov)  
Direct: (630) 829-9892  
Facsimile: (630) 515-1078

