

November 7, 2017

Ms. Laura Cender
U.S. Nuclear Regulatory Commission
Materials Licensing Branch
Laura.Cender@nrc.gov

Subject: Amendment to NRC License No. 48-18672-01, Additional Information

Dear Ms. Cender,

In response to your request for additional information related to NRC License No. 48-18672-01, which is maintained by the AECOM Technical Services, Inc., office at 1230 Wilson Street, Marquette, Michigan 49855, please find the following attachments:

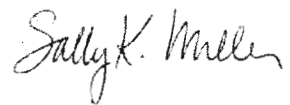
1. Delegation of Authority to Mark Kluz as the Radiation Safety Officer (signed by me as the Corporate RSO)
2. Training and experience (page B-3 from NUREG-1556 Volume 1, Revision 2)
3. Current and previous inventories of nuclear density gauges (dated July 1, 2017, and January 15, 2015)
4. Disposal records that corroborate the disposal of the gauges that appeared on the 2015 inventory but which we no longer own or possess, dated March 1, 2016

In accordance with your call and email dated October 31, 2017, AECOM understands that the NRC must set a possession limit based on the type of device authorized. The following information is in response to that email:

- Under License No. 48-18672-01, the AECOM office at 1230 Wilson Street, Marquette, Michigan owns the following gauges:
 - One Troxler 3440
 - Two Troxler 3430s
- In the past, this office owned the following gauge, and this gauge was disposed of as described in Item #4, above:
 - Campbell Pacific Nuclear MC1 DRP
- This office has never owned or possessed any of the following gauges:
 - Troxler 4640 Series, Troxler 4545, Troxler 3565, Troxler 1300 Series, Troxler 3241, Troxler 2226, Troxler 3216, Troxler 3218, Troxler 4300 Series
 - Campbell Pacific Nuclear 500 Series, Campbell Pacific Nuclear MSM2

Please let me know if you require additional information or if you have any questions.

Yours sincerely,

A handwritten signature in cursive script that reads "Sally K. Miller".

Sally K. Miller
AECOM Corporate Radiation Safety Officer
Associate Vice President, SH&E
sally.miller@aecom.com

cc: Jim Ingle
Mark Kluz

AECOM Technical Services of Michigan, Inc.
1230 Wilson Street
Marquette, MI 49855

Delegation of Authority to Radiation Safety Officer

Memo To: Radiation Safety Officer

From: Management Representative

Subject: Delegation of Authority

You, Mark S. Kluz, have been appointed radiation safety officer and are responsible for ensuring the safe use of radiation. You are responsible for managing the Radiation Protection Program; identifying radiation protection problems; initiating, recommending, or providing corrective actions; verifying implementation of corrective actions; stopping unsafe activities; and ensuring compliance with regulations. You are hereby delegated the authority necessary to meet those responsibilities, including prohibiting the use of byproduct material by employees who do not meet the necessary requirements and shutting down operations, when justified, to maintain radiation safety. You are required to notify management if staff does not cooperate and does not address radiation safety issues. In addition, you are free to raise issues with the U.S. Nuclear Regulatory Commission at any time. It is estimated that you will spend 5 hours per week conducting radiation protection activities.

Sally K. Miller (Sally K. Miller)

Oct. 14, 2017

Signature of Management Representative (Name)

Date

Manager Title AECOM DCS-Americas RSO

I accept the above responsibilities,

Mark S. Kluz

10/16/17

Signature of Radiation Safety Officer

Date

cc: Affected department heads

**Items 7 through 11: Training and Experience,
 Facilities and Equipment, Radiation Safety Program,
 and Waste Disposal**

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
<p>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE—RADIATION SAFETY OFFICER</p> <p>Name: _____</p>	<p>Documentation demonstrating the proposed radiation safety officer's training and experience (e.g., certificate of completion of the RSO's course and/or the authorized user's course).</p>	<p>Submit applicable documentation.</p>	
<p>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS</p>	<p>Before using licensed materials, authorized users will have successfully completed one of the training courses described in the "Criteria" part of the section titled, "Training for Individuals Working in or Frequenting Restricted Areas" in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses."</p>	<p align="center"><input checked="" type="checkbox"/></p>	<p align="center"><input type="checkbox"/></p>
<p>9. FACILITIES AND EQUIPMENT</p>	<p>Provide a facility diagram for each permanent portable gauge storage location. Include on the diagram the use of adjacent areas (including above and below), and information relevant to public dose and security as discussed in Sections 8.10.5, "Public Dose," and 8.10.6, "Operating, Emergency, and Security Procedures," respectively, in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses"</p>	<p>Submit applicable documentation.</p>	

**AECOM
Marquette Office**

Sealed Source Information Form

Physical Inventory and Radiation Survey

Date: July 1, 2017 Results: **ALL ACCOUNTED FOR**

By: James H. Ingle

Sample Number	Company Name, RSO, Address, & Phone No.	Model Number	Serial Number	Nuclide	Nuclide Serial No	Activity mCi	Sample Date	Today's Location	Today's Condition
7	AECOM / James H. Ingle 1050 Wilson Street Marquette, Michigan 49855 906-226-4839	3440	28941	Cs-137	750-3230	8	Leak Test: 1/4/17	Marquette Nuc. Room	OK
				Am-241:Be	47-25133	40	Calibration: 3/3/16		
9	AECOM / James H. Ingle 1050 Wilson Street Marquette, Michigan 49855 906-226-4839	3430	36337	Cs-137	77-3502	8	Leak Test: 1/4/17	Marquette Nuc. Room	OK
				Am-241:Be	78-1143	40	Calibration: 2/11/15		
11	AECOM / James H. Ingle 1050 Wilson Street Marquette, Michigan 49855 906-226-4839	3430	25594	Cs-137	75-8457	8	Leak Test: 1/4/17	Marquette Nuc. Room	OK
				Am-241:Be	47-21960	40	Calibration: 3/3/16		

Required leak test frequency: **Annually**

Physical Inventory Performed: July 1, 2017

AECOM Marquette Office

Sealed Source Information Form

Physical Inventory and Leak Testing

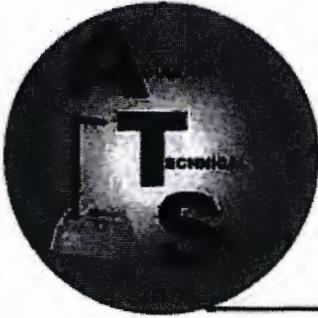
Date: January 01, 2015 Results: **ALL ACCOUNTED FOR**

By: James H. Ingle

Sample Number	Company Name, RSO, Address, & Phone No.	Model Number	Serial Number	Nuclide	Nuclide Serial No.	Activity mCi	Sample Date	Today's Location
3	AECOM / James H. Ingle 1050 Wilson Street Marquette, Michigan 49855 906-226-4839	MC1DRP	MD5030 7783	Cs-137	C-7783	8.0	Leak Test: 12/31/14	Marquette Nuc. Room
				Am-241:Be	A-7783	40.0	Calibration: 2/15/11	
7	AECOM / James H. Ingle 1050 Wilson Street Marquette, Michigan 49855 906-226-4839	3440	28941	Cs-137	750-3230	8	Leak Test: 12/31/14	Marquette Nuc. Room
				Am-241:Be	47-25133	40	Calibration: 2/20/13	
9	AECOM / James H. Ingle 1050 Wilson Street Marquette, Michigan 49855 906-226-4839	3430	36337	Cs-137	77-3502	8	Leak Test: 12/31/14	Marquette Nuc. Room
				Am-241:Be	78-1143	40	Calibration: 2/2/12	
11	AECOM / James H. Ingle 1050 Wilson Street Marquette, Michigan 49855 906-226-4839	3430	25594	Cs-137	75-8457	8	Leak Test: 12/31/14	Marquette Nuc. Room
				Am-241:Be	47-21960	40	Calibration: 2/20/13	
	AECOM / James H. Ingle 1050 Wilson Street Marquette, Michigan 49855 906-226-4839	3430	26003	Cs-137	75-8999	8	Leak Test: 12/31/14	Marquette Nuc. Room
				Am-241:Be	47-22382	40	Calibration: 3/12/12	

Required leak test frequency: **Annually**

Physical Inventory Performed: January 01, 2015



Richard Aguinaga
Aguinaga Technical Services
1924-C Calumet Drive
Sheboygan, WI 53081
rich@atsnuc.com
Phone: (920) 803-8789
Fax: (920) 803-6707

Where Customer Service Is a Priority!

LEAK TEST CERTIFICATE

Attn: Jim Ingle
AECOM
1230 Wilson Street
Marquette MI 49855

A leak test has been performed on the following gauge:

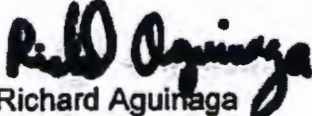
Manufacturer: Troxler
Model: 3430
Serial Number: 26003
Cs137 Serial Number: 75-8999
Am241/Be Serial Number: 47-22382

Date Sample Collected: 3/1/2016
Date Sample Analyzed: 3/1/2016
Collected by: Richard Aguinaga
Analyzed By: Richard Aguinaga
Sample Activity α : $< .000004 \mu\text{Ci}$
Sample Activity β : $< .00005 \mu\text{Ci}$

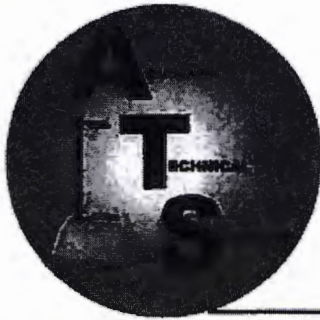
A sample activity of $0.005 \mu\text{Ci}$ or greater is considered by Federal and most Agreement state regulations to be a leaking source and must be removed from service and reported to the applicable regulatory agency within five days of the test.

Analysis found contamination of less than 0.005 microcurie.

Analysis authorized by WI License 117-1005-01


Richard Aguinaga
Radiation Safety Officer

REVIEWED BY RADIATION SAFETY OFFICER
(If required by your license sign below)



Richard Aguinaga
Aguinaga Technical Services
1924-C Calumet Drive
Sheboygan, WI 53081
rich@atsnuc.com
Phone: (920) 803-8789
Fax: (920) 803-6707

Where Customer Service Is a Priority!

LEAK TEST CERTIFICATE

Attn: Jim Ingle
AECOM
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Marquette MI 49855

A leak test has been performed on the following gauge:

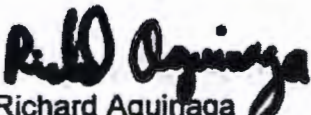
Manufacturer: CPN/Instrotek
Model: MC1DRP
Serial Number: MD50307783
Cs137 Serial Number: C-7783
Am241/Be Serial Number: A-7783

Date Sample Collected: 3/1/2016
Date Sample Analyzed: 3/1/2016
Collected by: Richard Aguinaga
Analyzed By: Richard Aguinaga
Sample Activity α : < .000004 μ Ci
Sample Activity β : < .00005 μ Ci

A sample activity of 0.005 μ Ci or greater is considered by Federal and most Agreement state regulations to be a leaking source and must be removed from service and reported to the applicable regulatory agency within five days of the test.

Analysis found contamination of less than 0.005 microcurie.

Analysis authorized by WI License 117-1005-01


Richard Aguinaga
Radiation Safety Officer

REVIEWED BY RADIATION SAFETY OFFICER
(if required by your license sign below)

Cender, Laura

From: Miller, Sally <sally.miller@aecom.com>
Sent: Tuesday, November 07, 2017 5:58 PM
To: Cender, Laura
Cc: Ingle, Jim; Kluz, Mark; Martysz, Ivan
Subject: [External_Sender] Amendment to NRC License No. 48-18672-01 - Additional Information Required - Revised Response
Attachments: Additional Info for License 48 18672 01 AECOM 10-24-17.pdf; Response for Addl Info for License 48 18672 01 AECOM 11-7-17.docx

Dear Ms. Cender: Please see the attached revised letter and attachments in response to your e-mail and call of October 31, 2017. Thank you.

Sally K. Miller, MS, CIH, STS
Radiation Safety Officer, DCS Americas
Associate Vice President, SH&E
DCS Americas Midwest Region
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www.aecom.com

Cender, Laura

From: Cender, Laura
Sent: Tuesday, October 31, 2017 1:37 PM
To: 'Miller, Sally'
Cc: Ingle, Jim; Kluz, Mark; Martysz, Ivan
Subject: RE: Re: Amendment to NRC License No. 48-18672-01 - Additional Information Required

Hello Ms. Miller,

Thank you for your prompt response. I apologize for my delay in getting back to you as I was out of the office last week with limited access to email.

To further clarify the previous request, due to changes to our licensing process we can no longer authorize possession limits based solely on the type of byproduct material (ex. 100 mCi of Cs-137), but now must set a possession limit based on the type of device authorized. With this change I now need to know the exact number of each type of device that you request to have authorized on the license. This number does not need to be what you currently possess. For example, you could request additional Troxler 3400 series gauges beyond the three that you currently possess if you have plans to acquire additional devices of this type in the future.

The following devices are currently listed on your license:

- Troxler 4640 Series
- Troxler 4545
- Troxler 3565
- Troxler 1300 Series
- Troxler 3241
- Troxler 2226
- Troxler 3216
- Troxler 3218
- Troxler 3400 Series
- Troxler 4300 Series
- Campbell Pacific Nuclear MC Series
- Campbell Pacific Nuclear 500 Series
- Campbell Pacific Nuclear MCM-2

As you do not currently possess the majority of these types of devices, please clarify which devices and how many of each model type should be authorized on the license. **Additional information is required to have any device models removed from the license.** Specifically, if a device model has never actually been possessed under the license a simple statement (1-2 sentences) confirming that AECOM never possessed or used the device is acceptable. If a device has been possessed, but since been disposed of or transferred to another licensed entity please provide a copy of the disposal/transfer record along with the most recent leak test for the device.

Please ensure your response is both signed and dated.

Thank you for your patience, and please feel free to contact me with any questions. I can be reached via email, or by phone at 630-829-9712.

Respectfully,
Laura Cender

Laura Cender
U.S. Nuclear Regulatory Commission
Materials Licensing Branch
E-mail: Laura.Cender@nrc.gov
Phone: (630) 829-9712

From: Miller, Sally [mailto:sally.miller@aecom.com]
Sent: Tuesday, October 24, 2017 7:34 PM
To: Cender, Laura <Laura.Cender@nrc.gov>
Cc: Ingle, Jim <Jim.Ingle@aecom.com>; Kluz, Mark <Mark.Kluz@aecom.com>; Martysz, Ivan <Ivan.Martysz@aecom.com>
Subject: [External_Sender] Re: Amendment to NRC License No. 48-18672-01 - Additional Information Required

Dear Ms. Cender: Please see the attached letter and attachments in response to your e-mail below. Thank you.

Sally K. Miller, MS, CIH, STS
Radiation Safety Officer, DCS Americas
Associate Vice President, SH&E
DCS Americas Midwest Region
D 1-303-740-2721 C 1-720-483-3976
sally.miller@aecom.com

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www.aecom.com

From: Cender, Laura [mailto:Laura.Cender@nrc.gov]
Sent: Thursday, October 12, 2017 4:44 PM
To: Ingle, Jim
Subject: Amendment to NRC License No. 48-18672-01 - Additional Information Required

Hello Jim,

Thank you for taking time out of your day to speak with me regarding your requested amendment to NRC License No. 48-18672-01. Per our discussion, the following additional information is required to continue processing the amendment:

1. Please provide a Delegation of Authority letter formally appointing Mark Kluz to the position of radiation safety officer. I have attached a sample delegation of authority letter that may be used and adjusted as necessary. The letter must be signed by both Mr. Kluz and someone in his senior management chain.
2. Changes to the NRC licensing process now require us to list each type of device separately on the license. Items 6-9 of your license currently authorize you to use and possess Troxler Electronic Laboratories models 2226, 3216, 2318, 4545, 3565, 3241 series, 3400 series, 4300 series, and 1300 series devices, as well as CPN International, Inc. model MCM-2 portable gauging devices.
 - a. Please clarify how many of each type of device model should be authorized on the license.
 - b. If a certain device model had been owned in the past but should no longer be listed on the license, please provide a copy of the device transfer or disposal records.
 - c. If a certain type of device should no longer be listed on the license and has never previously been owned or used please provide a statement with a signature and date confirming that the device has never been possessed under the license.

3. Due to an error made by the NRC during your license renewal in 2011, License Condition 12 currently states that authorized users will receive training described in Item 8 of the application dated October 11, 2000. I have attached a copy of the before mentioned Item 8, where it describes the training as being performed by Fred J. TePaske or Scott J. Mottlow, neither of whom are still employed by the company. To update this section I have attached a document titled "Appendix B – Item 8 – Training, you may either check the box saying "Yes" to Item 8 or attach alternative procedures. No need to include responses for the other Items listed on the page.

Please ensure your response is dated and includes a signature from either the RSO or a senior management representative.

Please let me know if you have any questions, I can be reached directly at 630-829-9712 or via email.

Thank you,
Laura

Laura Cender
U.S. Nuclear Regulatory Commission
Materials Licensing Branch
E-mail: Laura.Cender@nrc.gov
Phone: (630) 829-9712