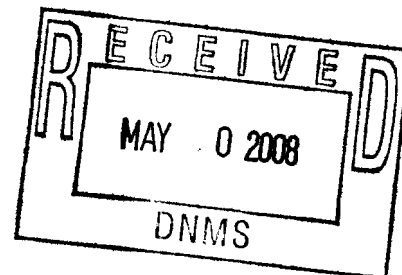




UNITED STATES DEPARTMENT OF COMMERCE  
National Institute of Standards and Technology  
325 Broadway  
Boulder, Colorado 80305-3328  
MC 173.02

27 May 2008

Jacqueline D. Cook, Senior Health Physicist  
US NRC/Nuclear Materials Licensing Branch  
Region IV<sup>3</sup>  
612 E. Lamar Blvd, Suite 400  
Arlington, TX 76011-4125



Re: License 05-03166-05, Amendment, Nuclide Addition

Dear Ms. Cook:

NIST-Boulder requests an amendment to license # 05-03166-05 to add the following nuclides:

Nuclide	Chemical and/or Physical Form	Maximum Amount
1. $^3\text{H}$	Encapsulated sources, Analytics (Eckert & Ziegler),	1 uCi (37 kBq)
2. $^{14}\text{C}$	Encapsulated sources, Analytics (Eckert & Ziegler),	1 uCi (37 kBq)
3. $^{36}\text{Cl}$	Encapsulated sources, Analytics (Eckert & Ziegler),	1 uCi (37 kBq)
4. $^{241}\text{Am}$	Encapsulated sources, Analytics (Eckert & Ziegler),	1 uCi (37 kBq)

**Uses:**


1. Sources are liquid scintillation counting standards and will be used to calibrate a liquid scintillation/gamma counter that NIST/Boulder recently purchased. Although the quantities being purchased are exempt quantities, apparently E&Z/Analytics (Atlanta, GA) cannot sell these sources unless there is a license line item. Source activities are nominally:  $^3\text{H}$  = 5 kBq;  $^{14}\text{C}$  = 2.16 kBq;  $^{241}\text{Am}$  and  $^{36}\text{Cl}$  = 1.6 kBq/each. NIST is also purchasing a  $^{55}\text{Fe}$  source from E&Z/Analytics but this nuclide is already on its license with a condition of use that allows for instrument calibration. The liquid scintillation/gamma counter is principally used to measure health physics wipes and sealed source leak tests.

**Procedures:** sources will be used to calibrate a liquid scintillation counter in accordance with manufacturer's recommendations and/or standard health physics practices.

For more information please contact Larry Grimm at 303/497-5019 or [larry.grimm@nist.gov](mailto:larry.grimm@nist.gov). Alternatively, contact Sonja Ringen at 303/497-7389 or [sonja.ringen@nist.gov](mailto:sonja.ringen@nist.gov).

**NIST**

Sincerely,

A handwritten signature in black ink, appearing to read 'Lawrence E. Grimm', followed by a horizontal line and a small dash.

Lawrence E. Grimm, RSO  
Safety, Health and Environment

CC: Sonja Ringen, Manager Office of Safety Health and Environment, NIST/Boulder  
Timothy Mengers, Health Physics, NIST/Gaithersburg  
Patrick Gallagher, Chairman of the Institutional Radiation Safety Committee, NIST

## ACCEPTANCE REVIEW MEMO (ARM)

Licensee: Dept of Commerce, NIST

License No.: 05-03166-05

Docket No.: 030-03732

Mail Control No.: 471828

Type of Action: Amend

Date of Requested Action: 05-27-08

Reviewer  
Assigned:

ARM reviewer(s): Torres

Response	Deficiencies Noted During Acceptance Review
	<ul style="list-style-type: none"><li>[ ] Open ended possession limits. Submit inventory. Limit possession.</li><li>[ ] Submit copies of latest leak test results.</li><li>[ ] Add IC L.C./Fingerprint LC, add SUNSI markings to license.</li><li>[ ] Confirm with licensee if they have NARM material.</li></ul>

Reviewer's Initials: \_\_\_\_\_

Date: \_\_\_\_\_

- ☐ Yes ☐ No Request for unrestricted release Group 2 or >. Consult with Bravo Branch.
- ☐ Yes ☐ No Termination request < 90 days from date of expiration
- ☐ Yes ☐ No Expedite (medical emergency, no RSO, location of use/storage not on license, RAM in possession not on license, other)
- ☐ Yes ☐ No TAR needed to complete action.

Branch Chief's and/or HP's Initials: \_\_\_\_\_ Date: \_\_\_\_\_

### SUNSI Screening according to RIS 2005-31

☐ Yes ☒ No Sensitive and Non-Publicly Available if any item below is checked

General guidance:

- \_\_\_\_\_ RAM = or > than Category 3 (Table 1, RIS 2005-31), use Unity Rule
- \_\_\_\_\_ Exact location of RAM (whether = or > than Category 3 or not)
- \_\_\_\_\_ Design of structure and/or equipment (site specific)
- \_\_\_\_\_ Information on nearby facilities
- \_\_\_\_\_ Detailed design drawings and/or performance information
- \_\_\_\_\_ Emergency planning and/or fire protection systems

Specific guidance for medical, industrial and academic (above Category 3):

- \_\_\_\_\_ RAM quantities and inventory
- \_\_\_\_\_ Manufacturer's name and model number of sealed sources & devices
- \_\_\_\_\_ Site drawings with exact location of RAM, description of facility
- \_\_\_\_\_ RAM security program information (locks, alarms, etc.)
- \_\_\_\_\_ Emergency Plan specifics (routes to/from RAM, response to security events)
- \_\_\_\_\_ Vulnerability/security assessment/accident-safety analysis/risk assess
- \_\_\_\_\_ Mailing lists related to security response

Branch Chief's and/or HP's Initials: RITC

Date: JUN - 6 2008

JUN - 6 2008

This is to acknowledge the receipt of your letter/application dated  
5-27-08, and to inform you that the initial processing,  
which includes an administrative review, has been performed.

DATE

☒ There were no administrative omissions. Your application will be assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card:

The action you requested is normally processed within 90 days.

☐ A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 471828.  
When calling to inquire about this action, please refer to this mail control number.  
You may call me at 817-860-8103.

Sincerely,

*Colleen Murnahan*

Licensing Assistant

BETWEEN: : (FOR LFMS USE)  
: INFORMATION FROM LTS  
: -----  
:   
License Fee Management Branch, ARM : Program Code: 03123  
and : Status Code: 0  
Regional Licensing Sections : Fee Category: 3P  
: Exp. Date: 20150531  
: Fee Comments:  
: Decom Fin Assur Req'd: N  
: ::

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED  
Applicant/Licensee: COMMERCE, DEPARTMENT OF  
Received Date: 20080530  
Docket No: 3003732  
Control No.: 471828  
License No.: 05-03166-05  
Action Type: Amendment

2. FEE ATTACHED  
Amount:             
Check No.:           

3. COMMENTS  
  
Signed Colleen Murnahan  
Date 6-04-08

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /\_/\_/)

1. Fee Category and Amount: \_\_\_\_\_

2. Correct Fee Paid. Application may be processed for:  
Amendment \_\_\_\_\_  
Renewal \_\_\_\_\_  
License \_\_\_\_\_

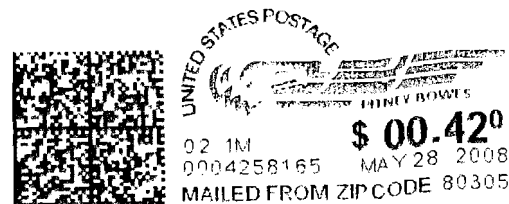
3. OTHER \_\_\_\_\_  
\_\_\_\_\_

Signed \_\_\_\_\_  
Date \_\_\_\_\_

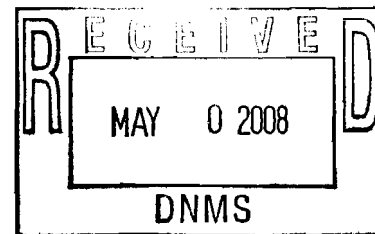
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Penalty For Private Use, \$300



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