

## CONVERSATION RECORD

COLLEEN CAROL CASEY  
MATERIALS LICENSING BRANCH  
UNITED STATES NUCLEAR REGULATORY COMMISSION  
REGION III  
2443 WARRENVILLE ROAD STE 210  
LISLE, ILLINOIS 60532-4352  
OFFICE: (630)-829-9841 FAX: (630) 515-1078  
EMAIL: COLLEEN.CASEY@NRC.GOV

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	TIME	DATE
ACTUALLY FAXED / EMAILED? YES.		June 5, 2012

Fax No.: 573-882-6360

Email address: dobeyr@missouri.edu

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NAME OF PERSON(S) CONTACTED	ORGANIZATION	TELEPHONE NO.
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Ron Dobey, RSO for University of Missouri-Columbia, Research Reactor Center 573-882-4211

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### SUBJECT

License No.: 24-00513-39

Control No.: Pending designation as of 6/5/12

*Just send one copy only to me - I will ensure it is matched to control no.*

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### SUMMARY

We have reviewed your letters dated February 20, 2012, (and March 6, 2012, requesting expedited review), April 27, 2012, and May 31, 2012, requesting an amendment to your byproduct materials license and find that we need additional information as follows:

1. In our request for additional information dated April 26, 2012, we asked you to please also specify how much activity, in curies, you are requesting.

We also asked you to please show your work (equations, assumptions, values, substitutions, units) in making this calculation so we can independently verify your conclusions. This portion of your response was not provided in your letter dated April 27, 2012.

Your response letter dated May 31, 2012, stated that you are requesting 1.07 microcuries of U-235 and that the enrichment will now be <20%.

Please respond by showing your work (equations, assumptions, values, substitutions, units) in making the calculation of grams U-235 to curies, so we can independently verify your conclusions.

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2. Attachment 1 to your letter dated May 31, 2012, states that "concentrated nitric acid" will be used in the preparation of the stock solution. Please respond by specifying what the concentration for the "concentrated" nitric acid will be.
3. From the chemical conversion procedure in Attachment 1 to your letter dated May 31, 2012, it is not clear to us which steps will be performed by Authorized User(s), who have been approved by the Radiation Safety Committee under your Type A broad scope license, and which steps, if any, will be performed by students in the class/project enrolled in your Nuclear Forensics summer School.

Please specifically state who will be performing which steps in the chemical conversion procedure, Authorized Users or students. If students will be performing these steps, please specifically describe the supervision and physical presence of Authorized Users during the conduct of the steps in this procedure.

In addition, since you have requested this authorization for an indefinite period, and not just a "one-time class," please state whether the steps in this procedure will be performed by Authorized Users and/or students hereafter.

4. Please provide the protocol/request for use that your Radiation Safety Committee (RSC) will use, or has used, to evaluate this experiment. Please address the specific potential chemical and radiological hazards associated with this procedure/experiment and how those hazards will be mitigated.

Please include specific information about bioassays (baseline, post-experiment and routine, as applicable), dosimetry equipment, safety procedures/facilities/remote handling tools, labeling, shielding, storage, waste streams, survey/counting equipment, all of the radiation safety program elements, as they pertain to this experiment/protocol.

Please do not make "blanket" references in your response to your last renewal application dated June 30, 2003.

Please state whether the RSC has evaluated this protocol/request for use yet and whether it was approved.

5. Please specify the name(s) and pertinent qualifications of the proposed Authorized User(s) for this procedure, both for the current experiment and for future experiments.

Please address whether your Radiation Safety Committee (RSC) has approved this individual(s) yet and provide the information that the RSC will use, or has used, to evaluate this individual(s).

6. In your letter to us dated March 6, 2012, you requested a completion date for this amendment of May 1, 2012. As you know, that date became untenable.

We understand that this request was intended to support a National Nuclear Forensics Summer School training opportunity on your campus beginning on June 11, 2012. We have learned that the Summer School lasts for six weeks.

Please state what your revised date of completion for this amendment request is now.

**Please also be reminded of the provisions in 10 CFR 30.9(a), "Completeness and accuracy of information,"..."(a) Information provided to the Commission by an applicant for a license or by a licensee or information required by statute or by the Commission's regulations, orders, or license conditions to be maintained by the applicant or the licensee shall be complete and accurate in all material respects."**

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this record will be available electronically for public inspection in the NRC Public Document Room or 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>.

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**ACTION REQUIRED**


**Please submit the requested information, attached to a written business letter, signed by a senior management official, within 15 calendar days (by June 20, 2012) to facilitate proper handling in our office. Please contact me if you need to make alternative response arrangements.**

**If we do not receive an adequate response by this date, we may "void" the current action without attempting to contact you further and without prejudice to resubmission of your request at a later date. Upon receipt of your response we will reactivate placement of your request in our database and resume our review. Address your written response, via an appropriately dated and signed (by management) cover letter, to my attention at the above address.**

**PLEASE NOTE THAT A "VOID" IS AN ADMINISTRATIVE PROCEDURE THAT PUTS YOUR AMENDMENT REQUEST "ON HOLD" (TAKES IT OUT OF OUR ACTIVE CASEWORK DATABASE) UNTIL YOU REACTIVATE IT VIA A WRITTEN RESPONSE. IT "BUYS" YOU TIME TO PREPARE A QUALITY RESPONSE AND IS GENERALLY REGARDED AS A "GOOD THING."**

**PLEASE DIRECT ANY QUESTIONS YOU MAY HAVE TO ME AT 630-829-9841 or 800-522-3025, ext. 9841.**

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NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
Colleen Carol Casey		June 5, 2012