

Yale OFFICE OF THE PROVOST

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courier
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New Haven CT 06510

October 26, 2020

Licensing Assistance Team
Attn: Steven Courtemanche
USNRC Region 1
2100 Renaissance Blvd, Suite 100
King of Prussia, PA 19406-2713

**Subject: Yale University
Amendment to NRC Broadscope License #06-
00183-03**

Dear Mr. Courtemanche,

Please accept this letter and attached NRC Form 313 as an amendment request for Yale University Broadscope License # 06-00183-03. This amendment is submitted to request the following actions:

1. Current research trends are driving Yale University researchers to consider laboratory work with a greater variety of radionuclides. Specifically, Yale researchers need greater flexibility for the possession and use of byproduct materials with atomic numbers greater than 83. Experiments with Thorium-227 and Actinium-225 are two examples of isotopes potentially necessary for work currently being planned for and considered. As per current university practices and policies, the Yale University Radiation Safety Officer (RSO) and Radiation Safety Committee (RSC) would be involved in approving new radioisotopes/uses/protocols, etc. This RSO/RSC review includes evaluation of quantities proposed for use and ensures uses are limited to the activities necessary for the application.

Accordingly, we hereby request that NRC provide this needed flexibility by amending Yale's Broadscope license to include:

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
Any byproduct material with atomic numbers 84-96	Any	Not to Exceed 20 milliCuries per radionuclide and 200 milliCuries total

2. By adding line item 1. above (Any byproduct material with atomic numbers 84-96) to Yale's Broadscope license, many line items currently listed individually on this license would now fall under this category. We believe this would simplify and clarify possession limits and thus request the removal of the following currently and separately listed materials:

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
Q. Polonium 208	Q. Any	Q. 2 microcuries
R. Polonium 209	R. Any	R. 2 microcuries
S. Polonium 210	S. Any	S. 100 microcuries
T. Actinium 227	T. Any	T. 100 microcuries
W. Thorium 228	W. Any	W. 10 microcuries
X. Thorium 229	X. Any	X. 10 microcuries
Y. Thorium 230	Y. Any	Y. 2 microcuries
Z. Thorium 232	Z. Any	Z. 19 microcuries
AA. Uranium 232	AA. Any	AA. 10 microcuries
CC. Uranium 234	CC. Any	CC. 1 microcurie
GG. Uranium 236	GG. Any	GG. 0.05 microcuries
II. Protactinium 233	II. Any	II. 1 millicurie
JJ. Protactinium 234	JJ. Any	JJ. 1 millicurie
KK. Neptunium 237	KK. Any	KK. 10 microcuries
LL. Neptunium 239	LL. Any	LL. 10 millicuries
SS. Americium 241	SS. Any	SS. 10 microcuries
XX. Curium 248	XX. Any	XX. 4 microcuries

3. In 2016 the NRC requested that Yale University amend this license (# 06-00183-03) to add administrative addresses for each of Yale's three campuses. The amendment was submitted as requested in 2016 and these administrative addresses currently appear in Condition 10 of Yale's Broadscope license. Although the NRC's intent in having Yale add these addresses was to have them serve only as primary administrative locations, the addition of these addresses has caused confusion with vendors of licensed material. Some vendors mistakenly construe these locations to be the only licensed material use locations at these campuses. Accordingly, we hereby request that NRC modify Condition 10 of said license to clarify that licensed material may be received, used or stored at all licensee facilities at each of the University's three campuses.
4. Yale's Broadscope license # 06-00183-03 was last renewed in 2015; the current expiration date is December 31, 2025. Yale University submits amendments to this license and regularly updates the NRC on changes pertaining to this license as necessary. As it is now current practice for the NRC to approve license applications for a period of 15 years rather than the previous 10 year time frame, Yale University respectfully requests an expiration date extension of this license by 5 years to December 31, 2030.

Any questions pertaining to these requested actions should be addressed to Yale University's Radiation Safety Officer, Tammy Stemen. Ms. Stemen can be reached at 203.737.2140 or via email at tammy.stemen@yale.edu.

Thank you for your consideration of this license amendment request. Our RSC is poised to review, process and allow safe research with byproduct materials with atomic numbers greater than the current restriction of 83 and thus a timely review of this amendment request is most appreciated.

Sincerely,



Scott Strobel
Yale University Provost

Cc: Dr. Albert Sinusas, Chair, Yale University Radiation Safety Committee
Dr. Stephanie Spangler, Vice Provost for Health Affairs and Academic Integrity
Peter Reinhardt, Director, Environmental Health and Safety

NRC FORM 313

(01-2020)
10 CFR 30, 32,
33, 34, 35, 36,
37, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR
MATERIALS LICENSE

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 01/31/2023

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Information Services Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), 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.

INSTRUCTIONS: SEE THE CURRENT VOLUMES OF THE NUREG-1556 TECHNICAL REPORT SERIES ("CONSOLIDATED GUIDANCE ABOUT MATERIALS LICENSES") FOR DETAILED INSTRUCTIONS FOR COMPLETING THIS FORM: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/>. SEND TWO COPIES OF THE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

MATERIALS SAFETY LICENSING BRANCH
DIVISION OF MATERIAL SAFETY, STATE, TRIBAL AND RULEMAKING PROGRAMS
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS 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 APPLICATIONS TO:

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

IF YOU ARE LOCATED IN:

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

MATERIALS LICENSING BRANCH
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 APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
1600 E. LAMAR BOULEVARD
ARLINGTON, TX 76011-4511

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

☐ A. NEW LICENSE

☒ B. AMENDMENT TO LICENSE NUMBER 06-00183-03

☐ C. RENEWAL OF LICENSE NUMBER

2. NAME AND MAILING ADDRESS OF APPLICANT (Include zip code)

Yale University Radiation Safety Section - EHS
135 College St. First Floor, Suite 100
New Haven, CT 06510

3. ADDRESS WHERE LICENSED MATERIALS WILL BE USED OR POSSESSED

Yale University Main and Medical School Campuses
New Haven, CT

Yale University West Campus
West Haven - Orange, CT

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Tammy Stemen

BUSINESS TELEPHONE NUMBER
203.737.2140

BUSINESS CELLULAR TELEPHONE NUMBER
203.410.5754

BUSINESS E-MAIL ADDRESS
tammy.stemen@yale.edu

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount
which will be possessed at any one time.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

10. RADIATION SAFETY PROGRAM.

12. LICENSE FEES (Fees required only for new applications, with few exceptions*)

(See 10 CFR 170 and Section 170.31)

*Amendments/Renewals that increase the scope of the existing license to a new or higher fee category will require a fee.

FEE
CATEGORY

EX

AMOUNT
ENCLOSED \$

0.00

PER THE DEBT COLLECTION IMPROVEMENT ACT OF 1996 (PUBLIC LAW 104-134), YOU ARE REQUIRED TO PROVIDE YOUR TAXPAYER IDENTIFICATION NUMBER. PROVIDE THIS INFORMATION BY COMPLETING NRC FORM 531: <https://www.nrc.gov/reading-rm/doc-collections/forms/nrc531info.html>.

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 37, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 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.

CERTIFYING OFFICER -- TYPED/PRINTED NAME AND TITLE

Scott Strobel, Provost

SIGNATURE

DATE

10/26/20

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	