



DEPARTMENT OF THE ARMY
U.S. ARMY TANK-AUTOMOTIVE AND ARMAMENTS COMMAND
6501 EAST 11 MILE ROAD
DETROIT ARSENAL, MICHIGAN 48397-5000

JAN 28 2021

TACOM Safety Office

Mr. Frank Tran
U.S. Nuclear Regulatory Commission
Region III
Materials Licensing Branch
2443 Warrenville Road, Suite 210
Lisle, Illinois 60532-4352

Dear Mr. Tran:

The U.S. Army Tank-automotive and Armaments Command (TACOM) is requesting an amendment to license 21-32838-01. TACOM would like to request removal of license condition 13.E.3. The existing license condition is not in accordance with the Sealed Source and Device Registry entry for these items and does not enhance health and safety of personnel working with the items. Accompanying this letter is an NRC Form 313, Application for Materials License and additional written justification for removal of this license condition.

If you have questions, please contact Mr. Nathan A Krzyaniak, TACOM Radiation Safety Officer, (586) 282-3676 or e-mail: Nathan.a.krzyaniak.civ@mail.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Darren L. Werner", is positioned above the typed name.

Darren L. Werner
Brigadier General, U.S. Army
Commanding

Enclosure

APPLICATION FOR
MATERIALS LICENSE

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, NE08-10202, (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-m/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 21-32838-01
- ☐ C. RENEWAL OF LICENSE NUMBER _____

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

U.S. Army Tank-automotive and Armaments Command
ATTN: AMTA-SF, Mail Stop 485
6501 E. Eleven Mile Road
Detroit Arsenal, MI 48397-5000

3. ADDRESS WHERE LICENSED MATERIALS WILL BE USED OR POSSESSED

US Army, Army Reserve, National Guard, and Marine
Corps installations; and temporary job sites throughout
the US and any other locations where the USNRC
maintains jurisdiction for regulating the possession and/or
use of licensed material

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Nathan A. Krzyaniak

BUSINESS TELEPHONE NUMBER

586-282-3676

BUSINESS CELLULAR TELEPHONE NUMBER

586-282-3768

BUSINESS E-MAIL ADDRESS

nathan.a.krzyaniak.civ@mail.mil

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.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

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

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

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

AMOUNT
ENCLOSED \$

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-m/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

Darren L. Werner, Brigadier General, Commander U.S.
Army Tank-automotive and Armaments Command

SIGNATURE

DATE

FOR NRC USE ONLY

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

Enclosure 2: Justification for Removal of Leak Testing Condition 13.E.3

License condition 13.E.3 on license 21-32838-01 states the following:

"3. When removing the devices from storage for disposal, prior to transportation, a statistical sample of the devices shall be leak tested. The leak test shall be performed taking a sample from the outer surface of the module at the point that is the most directly accessible to the source. The number of units to be leak tested for the statistical sample size will be determined, based on the lot size of the units selected for disposal, by using quality assurance standards or similar industrial sampling methods."

The TACOM Safety office requests removal of this license condition for the simple fact that a positive leak test (i.e., leaking source) result at this point in the demilitarization process does not impact any decisions-the data is not useful. Currently, this leak testing condition only applies at Pine Bluff Arsenal, where the radioactive components are removed from old chemical detection equipment. These radioactive components, leaking or not, are packaged and shipped to the Morris Consolidation Facility (MCF) for disposal as Low-Level Radioactive Waste (LLRW). The discovery of a leaking source does not change the handling or packaging requirements, despite our license application stating that any drift tube module exceeding 1000 DPM/100 cm² will be treated as LLRW-all of the drift tube modules referred to under license condition 13.E.3 are going to be disposed of as LLRW.

Existing protection measures at the demilitarization and disassembly facility are adequate to protect Army personnel from a leaking sealed source. The requirements for shipping these sources set forth in parts 172 and 173, Title 49 of the Code of Federal Regulations: Transportation, are adequate to protect members of the general public and shipping industry, whether the internal contents of a container are leaking or not. Upon receipt at the MCF, these containers remain sealed prior to additional movement to their final disposition location. The MCF does not discriminate between leaking and non-leaking sealed sources at this point- they all go the same place and the MCF license does not require discrimination between leaking and non-leaking sealed sources. The MCF license does not require leak testing of sources prior to disposition.

NUREG 1556 Vol 18 suggests performing leak tests in accordance with the Sealed Source and Device Registry (SSDR). Existing license conditions 13.E.1 and 13.E.2 are in accordance with the conditions of SSDR NR-1129-D-103-S and NR-1129-D-101-S and clearly protect personnel health and safety. A leaking source should certainly be identified and addressed prior to the device returning to service and these two leak testing conditions will ensure that. License condition 13.E.3; however, is not listed in the SSDRs. License condition 13.E.3 does not change the outcome and disposition of the sources, nor does it impact the health and safety of any personnel involved in the process. Simply put, license condition 13.E.3 does not have any net positive impact on health and safety because the data collected is not used in any decision-making.

Song, Taehoon

From: Tomczak, Tammy
Sent: Monday, February 01, 2021 7:44 AM
To: Song, Taehoon; Pavon, Sandy
Subject: FW: Amendment Request to License 21-32838-01 (UNCLASSIFIED)
Attachments: 21-32838-01 Amendment Request - Leak Testing Condition 13.E.3. 21-0128.pdf

Good morning, Tae and Sandy,

Can you please add the attached to ADAMS?

Thanks,
Tammy

From: Tran, Frank <Frank.Tran@nrc.gov>
Sent: Friday, January 29, 2021 1:00 PM
To: Tomczak, Tammy <Tammy.Tomczak@nrc.gov>; Orlikowski, Robert <Robert.Orlikowski@nrc.gov>
Subject: FW: Amendment Request to License 21-32838-01 (UNCLASSIFIED)

Hi Tammy,

Please process the attachment in as an amendment request. This may be involved a TAR which the NMSS has approved in the past for this licensee.

Thanks,
Frank

From: Krzyaniak, Nathan A CIV USARMY TACOM (USA) <nathan.a.krzyaniak.civ@mail.mil>
Sent: Thursday, January 28, 2021 4:04 PM
To: Tran, Frank <Frank.Tran@nrc.gov>; Forster, Sara <Sara.Forster@nrc.gov>
Cc: Alston, Kimberly D LTC USARMY USAMC (USA) <kimberly.d.alston.mil@mail.mil>
Subject: [External_Sender] Amendment Request to License 21-32838-01 (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Good Afternoon,

Attached is a request for an amendment to license condition 13.E.3. of license 21-32838-01. I would be happy to discuss this matter over the phone. Please let me know if there are any questions. Thank you.

Nathan Krzyaniak, CHP

Health Physicist
Safety Office
U.S. Army Tank-automotive and Armaments Command (TACOM)

Nathan.a.krzyaniak.civ@mail.mil
Office: (586) 282-3676 DSN: 786-3676

6501 East 11 Mile Road
AMTA-SF, MS 485
Detroit Arsenal, MI 48397-5000

CLASSIFICATION: UNCLASSIFIED