

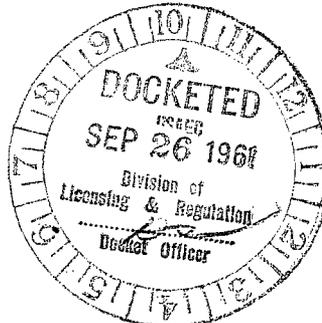


DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
WASHINGTON, D. C.

DOCKET NO. 40-6639
filed

SEP 19 1961

Mr. Harold L. Price
Director of Regulation
United States Atomic Energy Commission
Washington 25, D. C.



Dear Mr. Price:

The purpose of this letter is to request a comprehensive source material license for the Department of Army.

As you know, depleted uranium is officially classified as a source material because it retains limited value as a source of U-235 and Pu-239, and is therefore subject to special regulation under the Atomic Energy Act of 1954. The Army is planning to use depleted uranium in applications unrelated to its potential as a source material and has encountered administrative difficulties in complying with the special regulations governing its use.

Of most immediate concern are depleted uranium projectiles for spotting rounds for the DAVY CROCKETT weapons system. Depleted uranium is ideal for this application because its great density permits unique ballistic characteristics. In developing these rounds the Chief of Ordnance, Lieutenant General Hinrichs, has found it necessary to seek and obtain a license from the Commission authorizing him to possess depleted uranium and to fabricate and test these projectiles. However, since Lieutenant General Hinrichs commands only the Ordnance Corps of the Army, the present license does not permit transfer of projectiles to the field units which will employ them, nor does it permit expenditure of rounds in practice or combat. In addition, it does not provide for other uses of depleted uranium foreseen by the Army.

I understand that the administrative problems of providing depleted uranium to the Army were discussed by the Commissioners and the members of the Military Liaison Committee at a joint meeting on 10 August 1961, and that Dr. Seaborg stated the difficulties could readily be overcome by issuing a more comprehensive license. While licensing may not be the best long-term solution, I recognize that in view of the present wording and interpretation of the Atomic Energy Act it offers the most expeditious solution to this urgent problem.

*No cy. sent to PDR or Compliance as required
as withholding was never cleared up*

K/B

Mr. Harold L. Price

Therefore, request that the existing license to the Chief of Ordnance be withdrawn, and that a new license be issued to the Department of Army. This license should authorize possession of depleted uranium without quantity limitation and should permit fabrication, testing, export, issue to subordinate organizations, and expenditure of this material in uses other than production of U-235 or Pu-239. Appropriate Commission application forms are forwarded with this letter.

The Army staff is of course available to provide any assistance or additional information you may desire in resolving this matter.

Sincerely yours,



A. Tyler Port

Acting Assistant Secretary of the Army
(Installations and Logistics)

1 Incl (In quad)
License Application

Copy furnished
Chairman, AEC

DOCKET

40-6639

FORM AEC-2 (2-61) Previous editions are obsolete.

FORM APPROVED BUREAU OF BUDGET NO. 38-R002.8.

UNITED STATES ATOMIC ENERGY COMMISSION

APPLICATION FOR SOURCE MATERIAL LICENSE

Pursuant to the regulations in Title 10, Code of Federal Regulations, Chapter 1, Part 40, application is hereby made for a license to receive, possess, use, transfer, deliver or import into the United States, source material for the activity or activities described.

1. (Check one)
 (a) New license
 (b) Amendment to License No. _____
 (c) Renewal of License No. _____
 (d) Previous License No. _____

2. NAME OF APPLICANT
 Department of Army

3. PRINCIPAL BUSINESS ADDRESS
 Washington 25, D. C.

4. STATE THE ADDRESS(ES) AT WHICH SOURCE MATERIAL WILL BE POSSESSED OR USED
 At such sites as are in the best interest of national defense and are compatible with the need to protect public health and safety.

5. BUSINESS OR OCCUPATION
 Defense of the United States

6. (a) IF APPLICANT IS AN INDIVIDUAL, STATE CITIZENSHIP
 (b) AGE

7. DESCRIBE PURPOSE FOR WHICH SOURCE MATERIAL WILL BE USED
 Depleted uranium will be used in projectile casings for ammunition and in other military applications where its physical and chemical properties will provide unique capabilities for national defense. Depleted uranium will not be used as a source of U-235 or Pu-239.

8. STATE THE TYPE OR TYPES, CHEMICAL FORM OR FORMS, AND QUANTITIES OF SOURCE MATERIAL YOU PROPOSE TO RECEIVE, POSSESS, USE, OR TRANSFER UNDER THE LICENSE

(a) TYPE	(b) CHEMICAL FORM	(c) PHYSICAL FORM (Including % U or Th.)	(d) MAXIMUM AMOUNT AT ANY ONE TIME (in pounds)
NORMAL URANIUM	-	-	-
URANIUM DEPLETED IN THE U-235 ISOTOPE	Green salt or uranium metal	As required by specific military application	Unlimited
THORIUM	-	-	-

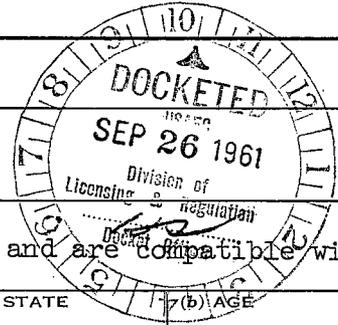
(e) MAXIMUM TOTAL QUANTITY OF SOURCE MATERIAL YOU WILL HAVE ON HAND AT ANY TIME (in pounds)
 Unlimited

9. DESCRIBE THE CHEMICAL, PHYSICAL, METALLURGICAL, OR NUCLEAR PROCESS OR PROCESSES IN WHICH THE SOURCE MATERIAL WILL BE USED, INDICATING THE MAXIMUM AMOUNT OF SOURCE MATERIAL INVOLVED IN EACH PROCESS AT ANY ONE TIME, AND PROVIDING A THOROUGH EVALUATION OF THE POTENTIAL HAZARDS ASSOCIATED WITH EACH STEP OF THOSE OPERATIONS.
 Depleted uranium will be fabricated into military supply items, and these items will then be stored, distributed to subordinate military units, and utilized or expended in training or combat.

10. DESCRIBE THE MINIMUM TECHNICAL QUALIFICATIONS INCLUDING TRAINING AND EXPERIENCE THAT WILL BE REQUIRED OF APPLICANT'S SUPERVISORY PERSONNEL INCLUDING PERSON RESPONSIBLE FOR RADIATION SAFETY PROGRAM (OR OF APPLICANT IF APPLICANT IS AN INDIVIDUAL).
 (For sources of data on specific procedures, controls and safety precautions covered by items 9 through 13, see attached supplemental sheets.)

11. DESCRIBE THE EQUIPMENT AND FACILITIES WHICH WILL BE USED TO PROTECT HEALTH AND MINIMIZE DANGER TO LIFE OR PROPERTY AND RELATE THE USE OF THE EQUIPMENT AND FACILITIES TO THE OPERATIONS LISTED IN ITEM 9; INCLUDE: (a) RADIATION DETECTION AND RELATED INSTRUMENTS (including film badges, dosimeters, counters, air-monitoring and other survey equipment as appropriate. The description of radiation detection instruments should include the type of radiation detected and the range(s) of each instrument.)

(b) METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED IN (a) ABOVE (for film badges, specify method of calibrating and processing, or name supplier.)



11(c). VENTILATION EQUIPMENT WHICH WILL BE USED IN OPERATIONS WHICH PRODUCE DUST, FUMES, MISTS, GASES, ETC.

12. DESCRIBE PROPOSED PROCEDURES TO PROTECT HEALTH AND MINIMIZE DANGER TO LIFE AND PROPERTY AND RELATE THESE PROCEDURES TO THE OPERATIONS LISTED IN ITEM 9; INCLUDE:
(a) PROCEDURES FOR USE OF NUCLEAR MATERIALS AND SAFETY FEATURES AND PROCEDURES TO AVOID NONNUCLEAR ACCIDENTS, SUCH AS FIRE, EXPLOSION, ETC., IN SOURCE MATERIAL STORAGE AND PROCESSING AREAS.

(b) EMERGENCY PROCEDURES IN THE EVENT OF ACCIDENTS WHICH MIGHT INVOLVE SOURCE MATERIAL.

(c) DETAILED DESCRIPTION OF RADIATION SURVEY PROGRAM AND PROCEDURES.

13. WASTE PRODUCTS: *If none will be generated, state "None" opposite (a), below. If waste products will be generated, check here and explain on a supplemental sheet:*

- (a) Quantity and type of radioactive waste that will be generated.
- (b) Detailed procedures for waste disposal.

14. IF PRODUCTS FOR DISTRIBUTION TO THE GENERAL PUBLIC UNDER AN EXEMPTION CONTAINED IN 10 CFR 40 ARE TO BE MANUFACTURED, USE A SUPPLEMENTAL SHEET TO FURNISH A DETAILED DESCRIPTION OF THE PRODUCT, INCLUDING:

- (a) PERCENT SOURCE MATERIAL IN THE PRODUCT AND ITS LOCATION IN THE PRODUCT.
- (b) PHYSICAL DESCRIPTION OF THE PRODUCT INCLUDING CHARACTERISTICS, IF ANY, THAT WILL PREVENT INHALATION OR INGESTION OF SOURCE MATERIAL THAT MIGHT BE SEPARATED FROM THE PRODUCT.
- (c) BETA AND BETA PLUS GAMMA RADIATION LEVELS (*Specify instrument used, date of calibration and calibration technique used*) AT THE SURFACE OF THE PRODUCT AND AT 12 INCHES.
- (d) METHOD OF ASSURING THAT SOURCE MATERIAL CANNOT BE DISASSOCIATED FROM THE MANUFACTURED PRODUCT.

CERTIFICATE

(This item must be completed by applicant)

15. *The applicant, and any official executing this certificate on behalf of the applicant named in Item 1, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 40, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.*

Department of Army

(Applicant named in Item 2)

SEP 19 1961

Dated _____

BY

PAUL E. IGNATIUS

Assistant Secretary of the Army for
Installations and Logistics

(Title of certifying official authorized to act on behalf of the applicant)

SEP 25 1961

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.

DOCKET NO.

40-6639

file

SUPPLEMENT TO APPLICATION FOR SOURCE MATERIAL LICENSE

General

The most immediate Army use of depleted uranium will be in projectiles for ammunition. The following table lists the documents which collectively will constitute Army policy for control and use of depleted uranium in this application.

These or comparable documents will also govern use of depleted uranium in other future applications.

Additional documents will be published as the need arises. It is anticipated that in the near future a new Army regulation will be published consolidating policy on depleted uranium.

Copies of the listed documents will be transmitted separately to the AEC staff.

"see report file"

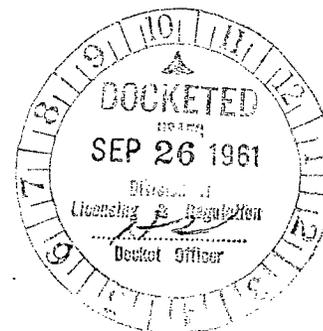
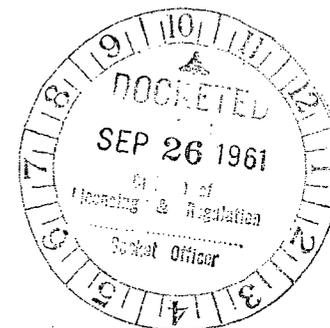


TABLE OF DOCUMENTS

see reports file

<u>Documents</u>	<u>Areas of Applicability</u>		
	<u>Fabrication</u>	<u>Storage, Distribution, or Disposal</u>	<u>Utilization</u>
1. Field Manuals			
a. FM 9-5: Ammunition service, Ordnance		X	
2. Technical Manuals			
a. TM 9-1100: Inspection of Ordnance materiel in hands of troops		X	
b. TM 9-1903: Care, handling, preservation and destruction of ammunition		X	
c. TM 9-1904: Ammunition inspection guide		X	
3. Army Regulations			
a. AR 40-414: Noncombat personnel dosimetry	X	X	X
b. AR 40-580: Control of hazards to health from radioactive materials	X	X	X
c. AR 40-582: Evaluating and reporting internal exposure to radioactive materials	X	X	X
d. AR 210-84: Report of loss, theft and recovery of government property	X	X	



Areas of Applicability

<u>Documents</u>	<u>Fabrication</u>	<u>Storage, Distribution, or Disposal</u>	<u>Utilization</u>
e. AR 385-10: Army safety program	X	X	X
f. AR 385-20: Administration of Army safety program	X	X	X
g. AR 385-40: Accident reporting and records	X	X	X
h. AR 385-60: Coordination with Armed Services Explosive Safety Board		X	X
i. AR 385-63: Regulations for firing ammunition for training, target practice and combat			X
j. AR 700-945: Safeguarding weapons and ammunition		X	
k. AR 711-1300-8: Ordnance ammunition stock status report		X	
l. AR 735-5: Property accountability, general principles and policies	X	X	
m. AR 742-910: Ammunition inspection and lot number report		X	
n. AR 755-380: Disposal of radioactive material	X	X	
4. Special Regulations:			
a. SR 210-20-20: Training areas and facilities for ground troops (ranges)			X

Areas of Applicability

<u>Documents</u>	<u>Fabrication</u>	<u>Storage, Distribution, or Disposal</u>	<u>Utilization</u>
5. Miscellaneous Publications			
a. MIMB 15-VI: Shipment of explosives and other dangerous articles		X	
b. MIMB 11-VIII: Proper placarding and labeling of shipments of ammunition, explosives and dangerous articles		X	
c. Cir 700-8: Security of small arms and ammunition		X	
d. ORD M 3-4, Vol. I and II: Ammunition control		X	
e. Frankford Arsenal SOP for Machining Depleted Uranium Metal	X		
f. Watertown Arsenal monograph on uranium alloys for critical Ordnance components	X		
g. Lake City Arsenal heavy metals manual	X		