

ARMY REGULATION

No. 700-52

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 17 December 1963

LOGISTICS

LICENSING AND CONTROL OF RADIOACTIVE MATERIALS

Effective 1 January 1964

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1. Purpose. This regulation—

a. Provides procedures for the submission of applications for the U.S. Atomic Energy Commission licenses for byproduct, source, and special nuclear materials.

b. Prescribes procedures for control of radioactive materials not licensed by the U.S. Atomic Energy Commission.

c. Provides guidance for Department of Army agencies in procuring, coordinating, or controlling the use of radioactive materials.

2. Applicability. The provisions of this regulation apply to all Department of the Army agencies applying for the use of unlicensed radioactive materials, or U.S. Atomic Energy Commission licenses for byproduct, source and special nuclear materials which will be possessed, used, stored, or disposed of within the United States and its territories and possessions. U.S. Atomic Energy Commission licenses are not required for byproduct, source, or special nuclear materials possessed, used, stored, or disposed by the Department of the Army agencies outside of the United States and its territories and possessions. This regulation is not applicable to the procurement or use of radioactive materials in nuclear or radiological weapons

and nuclear reactors established in accordance with provisions of Section 91 Atomic Energy Act of 1954, or to the operations of the Defense Atomic Support Agency.

3. Definitions. a. *Source material.* Uranium or thorium or any combination thereof, in any physical or chemical form or ores which contain, by weight, one-twentieth of one percent (0.05 percent) or more of uranium, thorium, or any combination thereof. Source material does not include special nuclear material.

b. *Special nuclear material.* Plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, or any other material which the U.S. Atomic Energy Commission pursuant to the provisions of section 51 of the Atomic Energy Act of 1954, 42 U.S.C. § 2071, determines to be special nuclear materials, but does not include source material; or any material artificially enriched by any of the foregoing but does not include source material.

c. *Byproduct materials.* Any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material.

*This regulation supersedes AR 40-580, 1 February 1957.

d. Radioactive materials. Natural occurring radioactive elements and isotopes such as radium and radon as well as byproduct, source, and special nuclear material or contaminated materials capable of emitting corpuscular or electromagnetic radiations. Included are radioisotopes and emitters permanently incorporated into adopted or experimental items of equipment.

e. Sealed source. Any radioactive material that is inclosed in, and is to be used in, a container in a manner intended to prevent leakage of the radioactive material or any of its daughter products.

f. Human use. The internal or external administration of radioactive material (byproduct material or otherwise) or the radiation therefrom to human beings.

g. Research and development. Includes theoretical analysis, exploration, or experimentation, or the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental or demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes, but not including the internal or external administration of radioactive material or the radiation therefrom to human beings for diagnostic or therapeutic purposes.

4. Responsibilities. *a. The Deputy Chief of Staff for Logistics.* The Deputy Chief of Staff for Logistics is responsible within the scope of this regulation for administrative approval of all license applications, except for human use, and for staff coordination over logistical implications which pertain to storage, accountability, classification, or disposal of items having Army-wide distribution.

b. The Surgeon General. The Surgeon General is responsible for staff functions and responsibilities regarding health aspects associated with the use of radioactive materials or sources of ionizing radiations. Within the scope of this regulation, this responsibility includes but is not limited to the administrative approval of licenses pertaining to human use and providing radiological survey teams to perform "on site" surveys of license applicants, of authorized users of radioactive materials, or of sources of ionizing radiation.

c. Installation and activity commanders. Such commanders having radioactive materials will be responsible for insuring their safe use, handling,

storage, and disposal and for the enforcement of measures prescribed by the Atomic Energy Commission and the Department of the Army. Nothing in this regulation will be interpreted as negating or superseding any Atomic Energy Commission requirement pertaining to the control of radioactive materials and safeguards pertaining thereto.

d. Licensees. Licensees will be responsible for full compliance with the applicable provisions of Title 10 Code of Federal Regulations (readily available upon request from the U.S. Government Printing Office, Washington, D.C., 20401).

e. Continental United States and oversea commanders. These commanders will be responsible for insuring that commanders of installations and activities under their jurisdiction are provided with proper authorization and with adequate means to safely handle radioactive materials. Any item produced for general or specific distribution will be controlled to the extent that a lifetime control of the radioactive material will be maintained. Excluded are items not exceeding the provisions of Atomic Energy Commission Schedules A and B, Title 10, Code of Federal Regulations, sections 30.71 and 30.72, those which contain less than one microcurie of radium or its daughter products, or those items exempted by terms of the license or written approval of The Surgeon General and/or the Atomic Energy Commission.

5. License applications. *a.* Applications for byproduct material (except human use), source material, and special nuclear material license will be submitted through major commanders having command jurisdiction over the applicant to the Deputy Chief of Staff for Logistics, Department of the Army, Washington, D.C., 20310 ATTN: Chief, PEMA Execution Division. The Deputy Chief of Staff for Logistics requires six signed and dated copies of each application. Application for byproduct material licenses (human use) will be submitted to The Surgeon General in accordance with provision of AR 40-37.

b. Procurement of application forms and regulations of the Atomic Energy Commission pertaining to the use and licensing of byproduct, source, or special nuclear materials may be obtained upon direct request to the United States Atomic Energy Commission, Division of Licensing and Regulations, Washington, D.C., 20310.

c. The commander or director of each installation and activity requiring the procurement, use, or storage of quantities of byproduct, source, or special nuclear material will obtain a license from the Atomic Energy Commission through command channels.

d. The commander of the installation or activity making application for a license will conduct a technical and administrative review of each application and planned use of the radioactive material to assure the completeness and adequacy of the application in accordance with current requirements of the Atomic Energy Commission Title 10, Code of Federal Regulations, and Army Regulations. License applications or amendments should be submitted at least 90 days prior to the time of expected use. Emergency processing is not deemed desirable or necessary and normally will be limited to unexpected operational requirements.

e. Approved licenses will be forwarded to the applicant through the major commanders having command jurisdiction over the applicant.

f. The United States Army Environmental Hygiene Agency, Edgewood Arsenal, Md., provides consultation service in accordance with provisions of AR 40-4. Major commanders may authorize direct communication with that agency for the purpose of determining the adequacy of health considerations as they pertain to qualifications of personnel and appropriateness of equipment, facilities, and procedures. Direct communication is limited, however, to the activities that can be conducted informally prior to formal submission of the application through command channels.

g. Direct correspondence with the Atomic Energy Commission in license applications is not authorized, except to reply to correspondence initiated by the Atomic Energy Commission when so authorized by major commanders. Three (3) information copies of all correspondence, with pertinent inclosures, between the applicant and the United States Atomic Energy Commission will be forwarded to the Deputy Chief of Staff for Logistics through command channels.

6. Atomic Energy Commission—specific licenses. a. *General.* Specific licenses are issued to an installation or activity commander who has made application and has met the requirements of Title 10, Code of Federal Regulations, Part 30.

b. *License for byproduct material.* Application for a specific license for byproduct material will be made on applicable AEC Form 313 (Application for By-Product Material License). Application for use of sealed sources in radiography will be submitted on AEC Form 313R.

c. *License for source materials.* Application for a specific license for source materials will be submitted on AEC Form 2 (Application for Source Material License).

d. *Special applications.* Special nuclear materials applications will be submitted by letter in accordance with the requirements of the Atomic Energy Commission contained in Title 10, Code of Federal Regulations, Part 70.

e. *Requirements and limitations.* General requirements and limitations affecting the granting of Specific Licenses are published in Title 10, Code of Federal Regulations, and commanders making application for radioactive materials should be familiar with the provisions of this document.

f. *Placing purchase orders.* To obtain byproduct materials or service irradiations from a facility of the Atomic Energy Commission, it is necessary to submit AEC Form 375 (United States AEC Isotope order blank) to the facility where the material or service is requested. This form is not used when purchasing from a commercial supplier.

7. No licensing required. The Atomic Energy Commission's special nuclear material regulations do not apply to the Department of Defense to the extent that the Department receives, possesses, and uses special nuclear material in accordance with direction of the President, pursuant to the Atomic Energy Act of 1954, Section 91, as amended, 42 U.S.C. § 2121.

a. AR 700-25 provides guidance in such instances.

b. Request for authorization to use accelerator produced radioactive materials and natural items such as radium materials which are not under licensed control of the Atomic Energy Commission and are of an activity of one microcurie or greater will be forwarded by letter through major commanders having command jurisdiction over the applicant to the Deputy Chief of Staff for Logistics, Department of the Army, Washington, D.C., 20310. ATTN: Chief, PEMA, Execution Division, prior to procurement and use.

c. Requests will describe the facilities to be used; the type and activity of the radioactive material requested; the name and qualifications of the individual responsible for their direct use and/or application; the purpose for which the isotopes are to be used; and, the instruments, health protection, and monitoring provisions to be employed. If it is the purpose to incorporate this material into an item of equipment which will be adopted, eventually, for general or specific distribution, provisions must be made for lifetime control and for final disposition of the material.

8. **Transfer.** Transfer of byproduct source or special nuclear materials shall not be made except in accordance with Title 10, Code of Federal Regulations, Sections 30.32, 40.51, and 70.42. Diversion of radioactive materials, not described in the approved request, will not be made without approval of the Atomic Energy Commission. Requests for such approval will be submitted through the channels prescribed for initial license applications. For those items which contain an activity of one microcurie or greater and which are not under the jurisdiction of the Atomic Energy Commission application for approval for transfer or diversion, will be made through channels previously described to the Deputy Chief of Staff for Logistics.

9. **New uses.** Plans and specifications for incorporating radioactive material into new items of issue will be submitted to the Deputy Chief of Staff for Logistics for review of possible health hazards and logistical implications before the item

[DCSLOG]

By Order of the Secretary of the Army:

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

Distribution:

Active Army: To be distributed in accordance with DA Form 12-9 requirements for DA Regulations Logistics, General—D.

NG: None.

USAR: None.

is type classified. The review of possible health hazards will be conducted in coordination with The Surgeon General who will provide technical advice and guidance in connection therewith.

10. **Disposal.** Commanders are responsible for disposition of radioactive materials in accordance with provisions of AR 755-380.

11. **Technical advice.** a. Technical advice relating to the safe handling and storage of equipment containing radioactive materials is a staff responsibility of The Surgeon General and will be furnished upon request through command channels, or direct in cases of emergency requiring expeditious action by The Surgeon General. Technical advice to aid individual users or commanders regarding the elimination of possible health hazards and/or the incorporation of health protective measures within the design and construction of facilities, including nuclear reactors, in which radioactive materials are to be used will also be furnished upon request.

b. Technical advice and guidance for the safe movement and transportation of nuclear and radioactive materials is a staff responsibility of the Chief of Transportation, and will be furnished upon request through command channels, or direct in cases of emergency requiring expeditious action by the Chief of Transportation.

12. **Surveys.** The Surgeon General will provide personnel to perform "on site" surveys and provide recommendations to meet the requirements of these regulations as well as those of the Atomic Energy Commission.

EARLE G. WHEELER,
General, United States Army,
Chief of Staff.