

HEADQUARTERS  
LEXINGTON-BLUE GRASS ARMY DEPOT  
LEXINGTON, KENTUCKY 40511-5000

LBAD-REGULATION  
NO. 40-7

20 July 1987

## Medical Services

MONITORING AND RECORDING OCCUPATIONAL  
EXPOSURES TO TECHNICAL RADIATION

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1. Purpose. To assign responsibilities and provide a procedure for monitoring and recording occupational exposures to ionizing radiation.

2. Scope. The procedure is applicable to all divisions and offices of the depot concerned with radiation exposure.

3. Policy.

a. Dosimetry Section, US Army Ionizing Radiation Dosimetry Center (AIRDC), will provide Film Badge Service to all divisions and/or offices of the depot as required.

b. Using elements will not renumber the film.

c. When a film evaluation indicates that an individual has received an overexposure to radiation, Radiological Protection Officer or his designated representative will advise the US Army Health Clinic and the Chief, AIRDC.

d. Individuals subject to technical radiation exposure in excess of 125 millirem in any calendar quarter will be certified as radiation workers and will be issued film badges routinely. Visitors and Occasional radiation workers may be issued film badges on an as-required basis as determined by the Radiological Protection Officer.

4. Definitions. For the purpose of this regulation the following definitions apply:

\*This LBADR supersedes PIM 40-7, dated 9 February 1978, including all changes.

a. Photodosimetry. The process of measuring personnel exposure to ionizing radiation by means of exposure on photographic film.

b. Dosage. The quantity of radiation received by an individual and expressed in roentgen equivalent man (rem).

c. Occupational radiation exposure. An exposure incurred as a result of an individual's employment or duties. Occupational exposure shall not be deemed to include the exposure of an individual to sources of ionizing radiation for the purpose of medical or dental diagnosis or therapy of that individual (AR 40-14).

d. Film badge. A device for measuring personnel exposure to ionizing radiation by photographic means.

e. Certified radiation worker. Personnel whose routine duties involve the direct use of ionizing radiation emitting materials and machines and who can reasonably expect to receive a dosage in excess of 125 mrem in one calendar quarter. Individual will be certified by the depot Radiation Control Committee.

f. Occasional radiation worker. Personnel, including visitors, who are infrequently required to work with or in close proximity to sources of ionizing radiation and who can reasonably be expected to receive a dosage of less than 125 mrem in any calendar quarter. Individual is not required to be certified by the depot Radiation Control Committee.

g. Ionizing radiation. Radiation emissions from radioactive material and/or machines, e.g., x-ray machines. For the purpose of this regulation alpha and beta particles, gamma rays, x-rays, and neutrons are examples of types of ionizing radiation.

## 5. Responsibilities.

a. Chiefs having operations involving sources of ionizing radiation will appoint one of their employees to perform liaison between the Chief, Dosimetry Section, AIRDC, and supervisors of the personnel involved in the operation.

b. The Medical Officer, US Army Health Clinic, will:

(1) Maintain DD Form 1141 records on each certified radiation worker in accordance with AR 40-14. Entries will be continuous and will include zero doses. Also maintain DD Form 1952 in accordance with AR 40-14.

(2) Maintain DD Form 1141 on each occasional radiation worker to include only those doses greater than zero. (Continuity of record is not necessary for these records.)

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c. The Radiological Protection Officer will review DC Form 1141 for all certified radiation workers quarterly to assure that exposure limits specified in AR 40-14 are not exceeded. This review will be performed at the US Army Health Clinic where records are maintained.

d. The Chief, Dosimetry Section, AIRDC, will be responsible for providing film badge services.

6. Procedures.

a. The Chief, Dosimetry Section, AIRDC, will:

- (1) Receive and process all requests for film badges.
- (2) Instruct all using elements as to use, return, reports and labels required.
- (3) Obtain film badge service results from the appropriate Army film processing activity.
- (4) Review film badge results, file one copy and send one copy to US Army Health Clinic.
- (5) Periodically review actual requirements for film badge service.

b. The Immediate Supervisor will:

- (1) Assure that a film badge is worn by each employee that regularly works with ionizing radiation and those entering warehouse 14, F Bay.
- (2) Notify, Chief, Dosimetry Section, AIRDC, of any names that have been added or removed from the list of personnel required to wear film badges.
- (3) Assure the employees wearing film badges are cautioned against tampering with or removing the film packets from badges.
- (4) Assure that film badges (when not being worn) are stored on a board which has been provided for storage of film badges. This board will be located in a cool, dry place, which is isolated from ionizing radiation sources.
- (5) Return film, holders, etc., in accordance with instructions from the Dosimetry Section, AIRDC.
- (6) Assure that used films are returned to Dosimetry Section, AIRDC, on first working day after the end of each wearing period.

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7. Reports. On the first working day after the end of each wearing period, Computerized Dosimetry Reports will be prepared and forwarded with exposed and/or unexposed films to the Chief, Dosimetry Section, AIRDC.

8. References.

- a. AR 40-14.
- b. SB 11-206.
- c. LBADR 40-6.

(HSXM-PCM-L)

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