

**WAC 246-243-150 Personnel monitoring control.** (1) A licensee may not permit any individual to act as a radiographer or as a radiographer's assistant unless, at all times during radiographic operations, the individual wears a direct reading pocket dosimeter, an alarming rate meter, and a personnel dosimeter on the trunk of the body. In permanent facilities where other appropriate alarming or warning devices are in routine use, the wearing of an alarming rate meter is not required.

(a) Pocket dosimeters must be capable of measuring exposures from zero to at least 200 milliroentgens. Electronic personal dosimeters may only be used in place of ion-chamber pocket dosimeters.

(b) Each personnel dosimeter shall be assigned to and worn by only one individual.

(c) Film badges must be replaced at periods not to exceed one month and other personnel dosimeters that require replacement must be replaced at periods not to exceed three months. All personnel dosimeters must be evaluated at least quarterly or promptly after replacement, whichever is more frequent.

(2)(a) Direct reading dosimeters such as pocket dosimeters or electronic personal dosimeters shall be read and exposures recorded at the beginning and end of each shift. Pocket dosimeters shall be charged at the beginning of each shift. Pocket dosimeters shall be checked annually at periods not to exceed 12 months for correct response to radiation. Acceptable dosimeters shall read within plus or minus 20 percent of the true radiation exposure.

(b) Each alarming rate meter must:

(i) Be checked to ensure that the alarm functions properly (sounds) prior to use at the start of each shift;

(ii) Be set to give an alarm signal at a maximum preset rate of 5 mSv/hr. (500 mR/hr.);

(iii) Require special means to change the preset alarm functions; and

(iv) Be calibrated annually at periods not to exceed 12 months for correct response to radiation: Acceptable rate meters must alarm within plus or minus 20 percent of the true radiation exposure rate.

(3) If an individual's pocket dosimeter is found to be off-scale, or if his or her electronic personal dosimeter reads greater than 2 millisieverts (200 millirems), and the possibility of radiation exposure cannot be ruled out as the cause, the individual's personnel dosimeter that require processing must be sent for processing and evaluation within 24 hours. For personnel dosimeters that do not require processing, evaluation of the dosimeter must be started within 24 hours. In addition, the individual may not resume work associated with licensed material use until a determination of the individual's radiation exposure has been made. This determination shall be made by the RSO or the RSO's designee.

(4) If the personnel dosimeter required by this section is lost or damaged, the worker shall cease work immediately until a replacement personnel dosimeter is provided and the exposure is calculated for the time period from issuance to loss or damage of the personnel dosimeter.

(5) Each licensee shall maintain the following exposure records:

(a) Direct reading dosimeter readings and yearly operability checks required by subsection (2) of this section for three years after the record is made.

(b) Records of alarm rate meter calibrations for three years after the record is made.

(c) Reports of personnel dosimeter until the department terminates the licensee.

(d) Records of estimates of exposures as a result of: Off-scale personal direct reading dosimeters, or lost or damaged personnel dosimeters until the department terminates the license. The time period for which the personnel dosimeter was lost or damaged shall be included in the records.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-11-063, § 246-243-150, filed 5/16/22, effective 6/16/22. Statutory Authority: RCW 70.98.050. WSR 03-12-062, § 246-243-150, filed 6/2/03, effective 7/3/03; WSR 00-08-013, § 246-243-150, filed 3/24/00, effective 4/24/00; WSR 94-01-073, § 246-243-150, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-243-150, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-243-150, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 83-19-050 (Order 2026), § 402-36-120, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-36-120, filed 12/8/80; Order 1084, § 402-36-120, filed 1/14/76; Order 1, § 402-36-120, filed 1/8/69; Rules (part), filed 10/26/66.]