Guidance in Bold Text

Rule 3701:1-68-02 Effective: 8/15/2017

General Requirements

(A) Each handler of non-medical radiation-generating equipment shall develop, implement and maintain a written quality assurance program in the form of a readily available manual or manuals, either in hard copy, printed format or electronic format. For the purpose of this Chapter, quality assurance program means written policies and procedures such as testing, auditing and inspection to assure compliance with applicable rules of the Administrative Code. The written quality assurance program shall at least address the following:

Each registrant must develop a written quality assurance program (policies and procedures) that identifies sound radiation safety practices and promotes the safe operation of radiation-generating equipment.

- **A written quality assurance program provides policies and procedures for testing, auditing and inspection to comply with regulations of the Ohio Administrative Code. This includes policies for prompt identification and correction of deficiencies, deviations, defective equipment or unsafe practices.**
- **The written quality assurance program must be maintained in the form of a hard copy or electronic manual.**
- **Rule 3701:1-38-11(D)(3) requires a review of the quality assurance/radiation protection program at intervals not to exceed twelve months.**
- **Inspectors review the written quality assurance program to verify that written policies and procedures exist, and the policy and procedures are implemented and followed.**
- **Implementation means policies and procedures are carried out and followed by the staff. Evidence of implementation of items throughout the Chapter may include:**
  - **Signature of receipt**
  - **Records of data and test results**
  - **Documented evidence**

(1) The evaluation and maintenance of non-medical radiation-generating equipment in accordance with the manufacturer's recommendations;

The written quality assurance program must indicate that the radiation-generating equipment is evaluated in accordance with the manufacture's specifications.

Rule 3701:1-68-04(C)(3) requires gauging units, closed beam analytical units, open beam analytical units, hand-held analytical units, and photoelectric spectrometers to be evaluation every 6 months to include:

- **Proper functioning of each interlock and warning signal.**
- **Checks that labels are properly affixed and legible.**

Rule 3701:1-68-06(D) requires cabinet systems to be evaluated every 3 months to include:

- **Proper functioning of each control device, interlock, indicator and warning signal.**
- **Checks that labels are properly affixed and legible.**

The periodic inspection by the Ohio Department of Health does not meet the evaluation and calibration requirements of this rule. The Ohio Department of Health's inspection is only to verify compliance with the rule requirements.

(2) Radiation monitoring requirements such as, surveys, occupational exposure limits and procedures regarding the use of area and personnel monitoring;

The written quality assurance program must include policies and procedures regarding radiation surveys, occupational exposure limits, the use of area and personnel monitoring devices.

Radiation area surveys:

- **Gauging units are required by rule 3701:1-68-04(C)(2) to have surveys completed:**
  - **Upon installation and annually radiation surveys thereafter.**
  - **Following any change in arrangement, number or type of local components.**
  - **When personnel monitoring reports show unexplained increases in monitoring reports.**

- **Closed Beam Analytical Units, Open Beam Analytical Units, Hand-held Analytical Units, and Photoelectric Spectrometers are required by rule 3701:1-68-04(C)(2) to have surveys completed:**
  - **Upon installation and annually radiation surveys thereafter.**
  - **Following any change in arrangement, number or type of local components.**
  - **Following any maintenance requiring disassembly or removal of a local component.**
  - **During maintenance or alignment procedures.**
  - **When abnormal conditions of local components are noted.**
  - **When personnel monitoring reports show unexplained increases in monitoring reports.**

- **Cabinet Units are required by rule 3701:1-68-06(E) to have surveys completed:**
  - **Upon installation and annually radiation surveys thereafter.**
  - **During the performance, calibration and other procedures requiring the presence of a primary beam.**
  - **When visual inspection reveals abnormal conditions.**

- **Radiographic Shielded Rooms are required by rule 3701:1-68-03(B)(2) to have surveys completed:**
  - **Upon installation and annually radiation surveys thereafter.**
  - **Following any changes in shielding or change in the x-ray system.**

- **Mobile Radiographic Units (temporary job sites) are required by rule 3701:1-68-03(B)(2) to have surveys completed:**
  - **Upon installation and annually radiation surveys thereafter.**
  - **Each time the system in moved to an area that has yet to be evaluated for radiation levels.**

- **Particle Accelerators are required by rule 3701:1-68-05(C)(2) to have surveys completed:**
  - **Upon installation.**
  - **Following any changes in shielding, operation, equipment, or occupancy.**

The general requirements for occupational and public exposure limits are found in rules 3701:1-38-12 and 3701:1-38-13.

Equipment specific personnel monitoring includes the following:

- **Rule 3701:1-68-04(E)(2)(i) require an operator of hand-held analytical equipment to wear a finger or wrist monitor.**

- **Rule 3701:1-68-04(C)(4)(b) requires maintenance personnel working with open beam analytical units that do not have engineering or administrative controls wear a finger or wrist monitor.**

- **Rule 3701:1-68-03(B)(9) requires radiation workers at facilities that operate radiographic units to wear whole body permanent personnel dosimeters and a direct read dosimeter.**

- **Rule 3701:1-68-05(B)(7) require operators of particle accelerators to wear a whole body permanent personnel dosimeter and a direct read dosimeter.**

(3) Facility compliance with occupational, pregnant worker and public exposure limits, to include notifying the director when individuals are occupationally over-exposed to radiation, pursuant to rule 3701:1-38-12 and rule 3701:1-38-21 of the Administrative Code;

The written quality assurance program must include policies regarding the occupational exposure of pregnant workers. In accordance with rule 3701:1-38-12(H), the dose to the fetus must not exceed 0.5 rem.

The written quality assurance program of the facility must include a procedure for notifying the Director of individuals occupationally over-exposed to radiation. The procedure must identify that the Director will be notified in accordance with rule 3701:1-38-21 of the OAC.

(4) The dissemination of quality assurance policies and a method to educate affected workers on those policies and any policy changes;

The written quality assurance program must have policies and procedures that indicate:

- **How quality assurance policies are provided to all workers that would be affected by those policies.**
- **The method used to provide policy changes to affected workers.**
- **Implementation is verified through staff interview and employees documented receipt of procedures.**

(5) Radiation safety training for ancillary personnel, to include:

Ancillary personnel are personnel who do not directly work with the radiation-generating equipment that have the potential to enter the restricted area.

(a) Potential hazards of being present in a restricted area;

The written quality assurance program must include radiation safety training to ancillary personnel on the potential hazards associated with being present in a restricted radiation area such as short-term and long-term health effects of radiation exposure. When radiation protection practices are followed, working around radiation-generating equipment is considered low risk.

(b) Location, boundaries and purpose of restricted areas; and

The written quality assurance program must include training of ancillary personnel that describes the restricted areas for protecting individuals from radiation exposure. The description must include:

- **The purpose of these restricted areas is to protect individuals from exposure to radiation.**
- **The rooms, open areas, and the boundaries of the restricted area during radiation exposure.**
- **All restricted areas must include the method for how staff are to ensure (enforce) the restricted areas and its boundaries during radiation exposures.**

(c) The identification of all radiation areas, warning signs, and warning lights;

The written quality assurance program must include training of ancillary personnel that describes purpose of and identifies the radiation areas, warning lights and warning signs.

(6) Prohibiting the use of non-medical radiation-generating equipment to intentionally irradiate human beings for any purpose;

The written quality assurance program must include a policy that radiation-generating equipment will not be used on human beings for any purpose.

(7) Prohibiting the operation of non-medical radiation-generating equipment if the provisions set forth in this rule or any other applicable requirements of Chapter 3701:1-68 of the Administrative Code are not met;

The written quality assurance program must include a policy that radiation-generating equipment will not be operated if the provisions of Ohio Administrative Code Chapter 3701:1-68 are not met.

(8) Requiring operators of permanent radiographic installations and cabinet systems that are designed to admit humans to verify no individual is present in the room during radiation exposure;

The written quality assurance program must include policies and procedures for operators to verify that no individual is present in the room or walk-in cabinet before initiating exposure.

(9) A current listing of all non-medical radiation-generating equipment, including the location and description of each system;

Examples:

- **A closed beam analytical unit located in room 302.**
- **Room 302 has a closed beam analytical unit.**

(10) Data and test results of the evaluation of the shielding and surroundings of all non-medical radiation- generating equipment;

The written quality assurance program must include the data and test results of the radiation surveys.

(11) Maintenance logs and incident reports for each non-medical radiation-generating equipment system;

The written quality assurance program must document the maintenance logs and incident reports for each radiation-generating unit.

(12) Current copies of valid certification identification cards, issued by the independent program referenced in paragraph (C)(2)(a) of this rule, for each radiographer;

The written quality assurance program must include copies of each radiographer's valid certification identification card.

(13) Maintaining records required by this chapter, according to the following provisions:

(a) Determination of an individual's radiation exposure following an event where that individual's pocket dosimeter was found off-scale, or that individual's electronic personnel dosimeter read greater than two millisieverts (two hundred millirem) shall be maintained until the director terminates the registration;

The written quality assurance program must maintain records for events where the pocket dosimeter is found off-scale or the personnel dosimeter reading was greater than 200 millirem. The records must be kept until the Director of the Ohio Department of Health terminates the registration.

(b) Calculation of an individual's radiation exposure from the time of issuance to the time of damage or loss of personnel dosimeter shall be maintained until the director terminates the registration;

The written quality assurance program must include policies for maintaining the calculated dose records of individuals whose personnel dosimeter was lost or damaged. The records must be kept until the Director of the Ohio Department of Health terminates the registration.

(c) In accordance with rule 3701:1-38-20 of the Administrative Code, dosimetry reports received from accredited NVLAP personnel dosimeter processors shall be kept until the director terminates the registration;

The written quality assurance program must include policies to maintain personnel dosimeter reports until the Director of the Ohio Department of Health terminates the registration.

(d) Area radiation surveys conducted at any site other than a temporary job site shall be maintained until the director terminates the registration;

The written quality assurance program must include policies for maintaining records of area radiation surveys until the Director of the Ohio Department of Health terminates the registration.

(e) Operator training and refresher training shall be maintained until the employment of the operator has been terminated or three years, whichever is longer;

The written quality assurance program must include policies and procedures to maintain records of all operator training and refresher training.

Records must be maintained until their employment is terminated, or at least 3 years, whichever is longer.

(f) All other records generated pursuant to the requirements of this chapter shall be maintained for no less than three years;

The written quality assurance program must include policies and procedures that all other records, not mentioned in this paragraph but included in the Chapter (Chapter 3701:1-68) will be maintained for three years.

(g) Check, test or evaluation records shall include the date of the check or test, the name of the inspector, the equipment involved, any problems found, and what repair and/or maintenance, if any, was performed; and

The written quality assurance program must include a policies or

procedures for record checks, tests, or evaluations to include the name of the person performing the check or test, the piece of equipment evaluated, any problems found, and any repairs performed.

(h) Each record must be legible throughout the specified retention period. The record may be the original or a reproduced copy or a microform provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of reproducing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records, such as letters, drawings, and specifications, must include all pertinent information, such as stamps, initials, and signatures. The registrant shall maintain adequate safeguards against tampering with and loss of records.

Records must be maintained by the facility in a method that keeps them safe against tampering or loss, and the records must be legible for inspection.

(14) Requiring non-medical radiation-generating equipment to be kept locked at all times, to prevent tampering or removal by unauthorized personnel, except when under the direct surveillance of the operator, or as may be otherwise authorized pursuant to this rule.

The written quality assurance program must include policies and procedures regarding the locking and safe keeping of the radiation-generating equipment to assure against tampering or unauthorized removal.

(B) Survey instruments and dosimeter requirements:

(1) Radiation survey instruments shall be calibrated:

Radiation survey instruments are to be calibrated.

(a) For the type of radiation to be monitored;

Survey instruments shall be calibrated for the type of radiation that it is used to monitor.

(b) Within the preceding six months for radiographic operations conducted at temporary job sites and twelve months for all other operations;

The calibration records of survey instruments used at temporary job sites must show that the survey instrument was calibrated in the last 6 months and within the last 12 months for all other radiographic equipment.

(c) After each instrument servicing other than battery replacement;

Survey instruments must be calibrated after service or repair. Battery replacement does not warrant a new calibration.

(d) Such that accuracy within plus or minus twenty per cent can be demonstrated;

Survey instruments must demonstrate and be calibrated to within +/- 20% accuracy.

(e) At two points located approximately one third and two thirds of full-scale on each scale for linear scale instruments;

The calibration records for each survey instrument must identify at least two points at which the calibration was completed.

For linear scale survey instruments, calibration must be done at 1/3 and 2/3 of full-scale for each linear scale.

(f) At midrange of each decade, and at two points of at least one decade for logarithmic scale instruments; and

The calibration of logarithmic scale instruments, must be completed at the midrange, and at a minimum of 2 points for at least one decade.

A decade is a factor of 10 between two numbers measured on a logarithmic scale.

(g) At appropriate points for digital instruments.

The calibration of digital survey instruments must be completed at no less than one point on each decade and at no less than two points on one decade. Those two points should be approximately 1/3 and 2/3 of the decade.

(2) Direct reading dosimeters shall:

(a) Have a range from zero to two millisieverts (two hundred millirem);

(b) Read within plus or minus twenty per cent of the true radiation exposure; and

(c) Be checked for correct response to radiation at periods not to exceed twelve months.

Direct reading dosimenters must meet the above specifications.

(3) Personnel dosimeters, except for direct and indirect reading dosimeters used to measure the dose to any extremity, that require processing to determine the radiation dose shall be processed and evaluated by a dosimetry processor that holds a current personnel dosimetry accreditation from the "National Voluntary Laboratory Accreditation Program" (NVLAP) of the national institute of standards and technology.

Personnel dosimeters must be processed by an accredited lab.

A list of approved labs can be accessed at:

https://www-s.nist.gov/niws/index.cfm?event=directory.results.

(4) The results of all survey instrument and direct reading dosimeter calibration shall be recorded.

All calibration results must be documented and maintained for review.

(C) Radiographic systems shall be operated by radiographers and radiographer's assistants who meet the following:

(1) No individual shall act as a radiographer or radiographer's assistant unless such individual has received copies of, been instructed in, and has demonstrated understanding by successful completion of a written examination and competency by successful completion of a practical examination in the subjects identified in this paragraph. Training shall be presented on a formal basis and shall include the following subjects:

(a) Fundamentals of radiation safety and methods of controlling radiation;

(i) Time;

(ii) Distance;

(iii) Shielding; and

(iv) Collimation;

(b) Characteristics of radiation;

(c) Units of radiation dose;

(i) Significance of radiation dose; and

(ii) Radiation protection standards;

(d) Biological effects of radiation;

(e) Levels of radiation from sources of radiation;

(f) Applicable requirements of state regulations;

(g) Registrant's written operating and emergency procedures;

(h) Operation, inspection, maintenance and control of non-medical radiation-generating equipment to be used;

(i) Use of radiation survey instruments;

(i) Operation;

(ii) Calibration; and

(iii) Limitations;

(j) Survey techniques;

(k) Use of personnel monitoring equipment, to include;

(i) Distribution, wearing and exchange procedures;

(ii) Typically expected exposure levels; and

(iii) Methods to keep exposure levels as low as reasonably achievable; and

(l) Case histories of non-medical radiation-generating equipment accidents.

Each operator must demonstrate competence in all aspects of the fundamentals of radiation safety, such as, the use of the radiation survey instruments and the registrant's written operating and emergency procedures. The training must be documented and maintained in accordance with rule 3701:1-68-02(A)(13).

(2) Certification requirements for radiographers:

(a) Radiographers shall be certified through an independent program approved by the United States nuclear regulatory commission, the "Conference of Radiation Control Program Directors Inc.," or equivalent certification approved by the director in accordance with the requirements in the appendix to this rule; and

A certified radiographer is required for the operation of:

- **Field Radiography,**
- **Temporary Job Sites,**
- **Mobile or portable radiographic systems used in a fixed location, and**
- **Radiographic systems permanently installed in an open area.**

The American Society of Nondestructive Testing (ASNT), IRRSP certification is acceptable. The ASNT, NDT certification is NOT acceptable.

Certification requirements can be found at www.ASNT.org. Select "Certification," then select "IRRSP."

Note: Operators of permanent radiographic installations that meet the design requirements specified in rule 3701:1-68-06 only need to be trained in the topics in (C)(1) of this rule, but do not need certified. See paragraph (I) of this rule.

(b) Prior to any individual acting as a radiographer, he or she shall demonstrate one month of prior on-the-job experience.

Maintain a record of the industrial radiographer's on-the-job experience. The on-the-job experience must have occurred prior to acting as a radiographer and must have been at least one month.

(D) The handler shall provide refresher training for operators of radiographic systems at intervals not to exceed twelve months.

The handler must provide refresher safety training to include at least the following every twelve months.

(1) The training shall include, as a minimum:

(a) Any results of internal inspections;

(b) New procedures or equipment;

(c) New or revised regulations;

(d) Any accidents or errors that have been observed; and

(e) Opportunities for attendees to ask safety questions.

(2) The training shall be recorded and include, as a minimum:

(a) A list of the topics discussed during the refresher training;

(b) The dates the training was conducted; and

(c) The names of the instructors and attendees.

Maintain a record of the operator refresher training for review. At a minimum this record must list the training topics, training date, instructor and attendee names.

(E) Requirements for the individual responsible for radiation protection (IRRP) for radiographic systems shall include, as a minimum:

(1) Complete training requirements of paragraphs (C)(1) and (C)(2) of this rule;

The Individual Responsible for Radiation Protection (IRRP) must be qualified for their position and have documentation of the completed training available for review. See (C)(1) and (C)(2) of this rule.

(2) Two thousand hours of hands-on experience as a qualified radiographer in radiographic operations;

Documentation that the IRRP has at least two thousand hours of hands-on experience as a qualified radiographer in radiographic operations.

(3) Formal education in the establishment and maintenance of a radiation protection program; and

Formal training must include a course specifically designed to provide training in running a radiation safety program, such as courses provided at universities or commercial training facilities.

(4) The director will consider alternatives to paragraphs (E)(2) of this rule when the IRRP for radiography has appropriate training and/or experience in the field of ionizing radiation.

The individual must have comparable experience to qualified as an IRRP. For example, if the individual does not have two thousand hours of hands on experience as a qualified radiographer, but is certified in health physics or industrial hygiene with previous experience in managing a radiation safety program of comparable size and scope, may be considered as meeting the experience requirements of (E)(2) of this rule.

(F) The specific duties and authorities of the individual responsible for radiation protection (IRRP) include, but are not limited to:

(1) Overseeing and approving all phases of the training program for operators, ensuring that appropriate and effective radiation protection practices are taught; and

The IRRP is responsible for approving the written training program for the operators. There must be a method for the IRRP to ensure that appropriate radiation protection practices are taught.

(2) Ensuring that operations are conducted safely and to assume control for instituting corrective actions when necessary.

The IRRP is responsible for ensuring that radiographic operations are conducted safely including implementing corrective actions when necessary.

(G) In addition to the requirements of paragraph (F) of this rule, the specific duties and authorities of the individual responsible for radiation protection (IRRP) of radiographic systems addressed in rule 3701:1-68-03 of the Administrative Code include, but are not limited to:

(1) Establishing and overseeing all operating, emergency, and ALARA procedures as required by Chapter 3701:1-38 of the Administrative Code, and reviewing them regularly to ensure that the procedures in use conform to current regulatory requirements, and to the registration conditions;

The IRRP is responsible for establishing, overseeing, and reviewing all operating, emergency, and ALARA procedures.

(2) Ensuring that required radiation surveys are performed and recorded in accordance with the Administrative Code, including any corrective measures when levels of radiation exceed established limits;

The IRRP is responsible for ensuring all required radiation surveys are performed and the radiation levels do not exceed established tolerance limits.

(3) Ensuring that personnel monitoring devices are calibrated and used properly by occupationally-exposed personnel, that records are kept of the monitoring results, and that timely notifications are made as required by paragraph (C) of rule 3701:1-38-21 of the Administrative Code; and

The IRRP is responsible for ensuring that personnel monitoring devices are used properly by staff, dose records are kept and timely notification of any results needing reported in accordance with rule 3701:1-38-21(C).

(4) Auditing each radiographer and radiographer's assistant at intervals not to exceed six months to ensure that the applicable sections of the Ohio Administrative Code and the registrant's operating and emergency procedures are followed.

(a) The audit must:

(i) Include observation of the performance of each radiographer and radiographer's assistant during an actual non-medical radiographic operation, and

(ii) Provide that, if a radiographer or a radiographer's assistant has not participated in a non-medical radiographic operation for more than six months since the last audit, the radiographer or radiographer's assistant must demonstrate knowledge of the training requirements of paragraphs (C)(1)(h), (C)(1)(i) and (C)(1)(j) of this rule by a practical examination before the individual can participate in a radiographic operation.

(b) The director may consider alternatives in those situations where the individual serves as both radiographer and individual responsible for radiation protection.

(c) In those operations where a single individual serves as both radiographer and individual responsible for radiation protection, and performs all radiographic operations, an audit program is not required.

(d) A record of the audit shall include, as a minimum:

(i) The identity of the radiographer or radiographer's assistant audited;

(ii) A list showing the items checked; and

(iii) Any non-compliance observed by the individual responsible for radiation protection.

The IRRP is responsible for auditing each radiographer and radiographer's assistant at intervals not to exceed six months.

(H) Operators of analytical, cabinet, hand-held and miniature radioscopic systems are exempt from the requirements of paragraphs (C), (D), and (E) of this rule, and shall be required to receive training and demonstrated competence in the following:

Operators of analytical, cabinet, hand-held and miniature radioscopic systems must be trained in the topics listed below. The training must be documented and maintained in accordance with rule 3701:1-68-02(A)(13).

(1) The safe operation procedures for the equipment;

Operators of analytical, cabinet, hand-held and miniature radioscopic systems must be trained is the safe operating procedures for these radiation-generating units.

(2) Precautions and measures to take to minimize radiation exposure;

Operators of analytical, cabinet, hand-held and miniature radioscopic systems must be trained in the precautions to minimize radiation exposure, such as:

- **Minimizing exposure time for samples or minimizing time in a radiation area decreasing radiation exposure.**
- **Increasing the distance from the radiation source minimizes radiation exposure. The intensity and dose of radiation decreases as you increase the distance from the source.**

- **Shielding minimizes radiation exposure. Barriers such as lead, concrete, and water provide protection from radiation exposure.**

(4) Significance of the various radiation warning, safety devices, and interlocks incorporated into the systems, or the reasons they have not been installed on certain parts of the systems and the extra precautions required in such cases;

Operators of analytical, cabinet, hand-held and miniature radioscopic systems must be trained in purpose of the interlocks, warning lights, and warning signs of radiation-generating equipment. If the these are not installed, the reason and extra precaution necessary.

(4) Recognition of the potential hazards of use, biological effects of radiation, radiation risks, and recognition of signs and symptoms of an acute localized exposure;

Operators of analytical, cabinet, hand-held and miniature radioscopic systems must be trained to recognize potential hazards associated with radiation exposure include acute and long-term health effects.

- **Acute effects: nausea, vomiting, headache, and diarrhea.**
- **A long-term effect of radiation exposure can be an increased risk of cancer.**

(5) Procedures for reporting an actual or suspected accidental exposure or other radiation safety concerns, such as any unusual occurrence or malfunction that may involve exposure to radiation; and

Operators of analytical, cabinet, hand-held and miniature radioscopic systems must be trained in reporting accidental exposures or radiation safety concerns.

(6) Performing surveys where applicable.

Operators of analytical, cabinet, hand-held and miniature radioscopic systems must be trained in performing area surveys.

- **Closed Beam Analytical Units, Open Beam Analytical Units, Hand-held Analytical Units, and Photoelectric Spectrometers are required by rule 3701:1-68-04(C)(2) to have surveys completed:**
  - **Upon installation and annually radiation surveys thereafter.**
  - **Following any change in arrangement, number or type of local components.**
  - **Following any maintenance requiring disassembly or removal of a local component.**
  - **During maintenance or alignment procedures.**
  - **When abnormal conditions of local components are noted.**
  - **When personnel monitoring reports show unexplained increases in monitoring reports.**

- **Cabinet Units are required by rule 3701:1-68-06(E) to have surveys completed:**

  - **Upon installation and annually radiation surveys thereafter.**
  - **During the performance, calibration and other procedures requiring the presence of a primary beam.**
  - **When visual inspection reveals abnormal conditions.**

(I) Operators of permanent radiographic installations that meet the design requirements of rule 3701:1-68-06 of the Administrative Code and operators of non-radiographic particle accelerators, or bomb detection systems are required to meet the training topics of paragraph (C)(1) of this rule, but are exempt from the requirements of paragraph (C)(2) and (E) of this rule.

The operators of permanent radiographic units that meet Rule 3701:1-68-06, and bomb detection systems are exempt from (C)(2) of this rule: The operators do not have to be certified by USNRC, CRCPD, or ASNT. This includes the IRRP.

(J) The director may, upon application thereof or upon his or her own initiative, grant a variance to the requirements of this chapter as he or she determines is authorized by law, provided that the registrant shows to the satisfaction of the director that there is good cause for the variance, and that the variance will not result in any undue hazard or effect on the public health and safety or environment. The terms, conditions, and expiration of the variance shall be set forth in writing by the director. Failure to comply with the terms of the variance may result in immediate revocation of the variance.

A request for a variance must be made in writing to the Director and must show good reason for the variance and that the variance will not result in any undue hazard or effect on public health and safety or environment.

Variances that are approved by the Director will set the terms, conditions and expiration of the variance. If the terms and conditions of the variance are not met, the variance may be revoked.

If the variance has expired or the effective date of the rule in which the variance was granted has changed, the variance is invalid and a new variance must be requested.

A copy of the approved variance must be maintained on site.

If a variance has been granted, it is best to provide the inspector with a copy of the variance before the inspection begins. The inspector will verify the expiration date and that the terms outlined in the variance are being met.