ENVIRONMENTAL REGULATION

DIVISION OF ENVIRONMENTAL SAFETY AND HEALTH

COMMISSION ON RADIATION PROTECTION

RADIATION PROTECTION AND RELEASE PREVENTION ELEMENT

Radiation Protection Programs

Radiologic Technology

Proposed Repeal and New Rules: N.J.A.C. 7:28-19

Authorized by: Lisa P. Jackson, Commissioner, Department of Environmental Protection

and Dr. Julie K. Timins, Chairperson, the Commission on Radiation

Protection

Authority: N.J.S.A. 26:2D-1 et seq., 26:2D-24 et seq., specifically 26:2D-7, 9, 21 and 29(c)

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

DEP Docket No.: 19-07-08/310

Proposal Number PRN 2007-

A **public hearing** concerning this proposal will be held on November 14, 2007 at 1:00

P.M. at:

Large Conference Room

Department of Environmental Protection

Radiation Protection and Release Prevention Element

25 Arctic Parkway

Ewing Township, New Jersey 08638

Submit written comments by (60 days after publication) to:

Alice A. Previte, Esq.

Attn: DEP Docket No. 19-07-08/310

Office of Legal Affairs

Department of Environmental Protection

401 East State Street

P.O. Box 402

Trenton, New Jersey 08625-0402

The Department of Environmental Protection (Department) and the Commission on Radiation Protection (Commission) request that commenters submit comments on disk or CD as well as on paper. Submission of a disk or CD is not a requirement. The Department prefers Microsoft Word 6.0 or above. MacintoshTM formats should not be used. Each comment should be identified by the applicable N.J.A.C. citation, with the commenter's name and affiliation following the comment.

The agency proposal follows:

Summary

As the Department and the Commission have provided a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

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In 1958, the Radiation Protection Act, N.J.S.A. 26:2D-1 et seq. (the Act), was enacted. This Act provides authority to set standards for the possession, handling, transportation and use of sources of radiation within the State of New Jersey. The Act established the State's Radiological Health Program, which was subsequently transferred from the State Department of Health to the Department of Environmental Protection (Department). The Act also created the New Jersey Commission on Radiation Protection (Commission) and vested in that body the authority to promulgate rules and regulations as may be necessary to prohibit and prevent unnecessary radiation. In 1969, the Radiologic Technologist Act, N.J.S.A. 26:2D-24 et seq. was enacted. The Radiologic Technologist Act created the New Jersey Radiologic Technology Board of Examiners (Board) and vested in that body the authority to establish the standards for education and licensing of operators of ionizing radiation-producing equipment and the standards for schools in seven categories of radiologic technology. These categories are diagnostic radiologic technology, radiation therapy technology, chest radiologic technology, dental radiologic technology, orthopedic radiologic technology, podiatric radiologic technology and urologic radiologic technology. Currently, there are 62 Board-approved educational programs and over 20,000 individuals with active technologist licenses.

In 1984, the Commission and the Department promulgated N.J.A.C. 7:28-19 to implement the Radiologic Technologist Act. Existing N.J.A.C. 7:28-19 establishes standards that specify: 1) licensure requirements for non-physicians who operate radiation-producing equipment on humans; 2) procedures by which the Board will issue licenses to individuals including the examination of candidates for licensure; 3) processes for suspension or revocation of a license; 4) definition of the practice of radiologic technology and radiation safety requirements for individuals engaging in the practice of radiologic technology; 5) the ordering of

all radiologic procedures by a licensed physician and the supervision of licensed technologists by a licensed physician; 6) requirements for student admission into an educational program and the rules governing the use of ionizing radiation-producing equipment by students; 7) requirements for schools seeking program approval in any of the radiologic technology curricula; and 8) fees to be charged for examination and licensure applications, as well as renewal fees and license replacement fees.

The regulations implementing the Radiologic Technologist Act are necessary to ensure that New Jersey citizens are protected from unnecessary radiation exposure as prohibited by the Act. The regulations ensure that only properly educated, qualified individuals are permitted to utilize ionizing radiation-producing equipment on humans during radiological examinations. Such requirements increase the quality of health care delivered in New Jersey by improving medical diagnostic imaging and reducing the likelihood that patients will receive unnecessary radiation exposure during a radiologic examination.

There have been numerous changes and technological advances in the field of radiologic technology since the last significant amendment to these rules in 1990. (See 22 N.J.R. 1975(a), 22 N.J.R. 3227(c).) The Commission and the Department have determined that extensive revisions to N.J.A.C. 7:28-19 are necessary to adequately address these changes. Accordingly, the Commission and the Department propose to repeal existing subchapter 19 and establish a new subchapter 19. The proposed new rules include a broader scope of practice for those to whom the rules apply, new terms and definitions utilized throughout the subchapter, standards related to unethical conduct for use in determining licensure and examination eligibility, new requirements for facilities or persons who instruct end users in the use of x-ray equipment,

increased fees for radiologic technologist examination and licensure, new application and annual fees for schools of radiologic technology, codification of Board standards and curricula requirements for schools of radiologic technology, and recognition of a new radiologic technologist profession, the Radiologist Assistant (RA).

The proposed rules affect students of radiologic technology, as well as licensed radiologic technologists. Additionally, the proposed rules apply to any individual who operates ionizing radiation-producing equipment used on humans. The proposed rules delineate the scope of authorized activities for those who are permitted to engage in the practice of radiologic technology either as a student or a licensed technologist. The proposed rules also identify the types of conduct that are deemed unethical, which are subject to licensure sanction pursuant to the Radiologic Technologist Act. Actions that meet the definition of unethical conduct will be considered by the Board to indicate that an applicant is not of good moral character when determining applicant eligibility for examination, license or license renewal. The Board also considers unethical conduct when considering whether to revoke a license, and when considering other enforcement action.

The proposed rules also affect schools of radiologic technology through the codification of many of the Board's curriculum standards and responsibilities for schools of radiologic technology. The publication of Board standards and program responsibilities in regulation provides transparency to the regulated community regarding the Board's expectations of both new and existing schools. Each school would refer to the rules when crafting its program curricula and establishing school policies.

The proposed rules also affect companies and individuals that provide training to operators of ionizing radiation-producing equipment used on humans. The proposed rules

prohibit companies or individuals from training individuals in the use of such equipment, other than those persons that the rules identify. The Commission and the Department believe that prohibiting such practice will protect the public from exposure to unnecessary radiation.

The proposed rules affect radiologic technologists who are or become nationally certified as a Radiologist Assistant (RA), students enrolled in an RA curriculum, and schools that teach the RA curriculum, as well as radiologists who supervise student RAs and certified RAs. The proposed rules permit the certified RA to perform non-invasive fluoroscopic procedures under the supervision of a radiologist who is immediately available on the premises to provide assistance, but not necessarily in the fluoroscopic room. Under the proposed rules, the New Jersey State Board of Medical Examiners, which regulates the practice of medicine, is authorized to define those fluoroscopic procedures that are considered non-invasive and within the scope of practice of the RA. The rules also specify the responsibilities of schools that teach the RA curriculum and the responsibilities of the RA student. Finally, the proposed rules specify the responsibilities of radiologists who provide supervision of student RAs and certified RAs. In preparing the proposed rules regarding RAs, the Commission and the Department have consulted with the University of Medicine and Dentistry, which is currently the only New Jersey school to teach the RA curriculum.

The proposed rules affect all owners, licensed practitioners and/or registrants of ionizing radiation-producing equipment used on humans. The rules delineate the responsibilities of such groups or individuals regarding the operation and use of such equipment under their control. Such groups or individuals may not allow unauthorized persons to operate the equipment, and may not allow the equipment to be operated in an unauthorized manner.

The proposed rules increase fees to applicants for licensing examination, applicants for licensure, and applicants for license renewal. Under the proposed rules, examination fees will increase from \$60.00 to \$160.00; licensure fees will increase from \$40.00 to \$60.00; and biennial renewal licensure fees will increase from \$50.00 to \$90.00. Initial and renewal licenses are valid for up to two years depending on the date of issuance. The duration of license and license renewal are described in greater detail later in this Summary. The Department finds it necessary to increase the above listed fees in order to cover the costs associated with the administration of the radiologic technologist licensure program. Fees for administering the program have not been increased since 1990. Since that time, the Department has implemented many improvements in its services to the licensed community, while not increasing fees. Some of the improvements include an enhanced database to record technologist examination and licensure information; 24hour on-line access to technologist licensure status information via the Department's website; and implementation of a computerized examination that allows candidates to schedule the exam at their convenience and, in most cases, provides immediate examination results. In addition, the Department is working toward providing on-line application capabilities for examination, licensure and license renewal.

The Department also seeks to increase the staffing resources of the Technologist Certification Section by one full time inspector. The Technologist Certification Section is currently staffed by a supervisor, two professionals and one administrative support person. These staffing levels have remained unchanged since 1989. During this time, the number of licensed individuals has increased, and the number of approved schools and the number of complaints filed against unlicensed individuals illegally engaged in the practice of radiologic technology has increased, as have complaints against licensed technologists and against

approved schools. The Department intends to hire an additional full time inspector to assist in the investigation of such complaints and to conduct compliance investigations at over 8,500 facilities in New Jersey that employ licensed technologists to operate ionizing radiation-producing equipment.

The proposed rules also include new fees to be assessed to schools of radiologic technology. The proposed new fees include an application review fee for new schools of radiologic technology, as well as annual fees for all approved schools of radiologic technology, to cover the Department's costs associated with the oversight of ongoing operations at these schools. Historically, the Department's Technologist Certification Section has provided services such as application review, clinical affiliate review and on site compliance inspection review at no charge to the educational programs. The Department resources necessary to provide these services are substantial.

The Board currently has 62 approved schools in various disciplines of radiologic technology. Under the existing rules, each new school must submit an initial application for review. Each approved diagnostic radiologic technology or radiation therapy school (currently there are 21 in the State) must also submit "self study review documents" at the end of each accreditation period (typically every three, five or eight years). These documents are essentially new applications that require substantial amounts of staff time to review. The Technologist Certification Section, as charged by the Board, spends on average at least 80 hours reviewing a program's application and self-study report. In addition, each self-study report requires a multiday onsite evaluation of the program by Department personnel or consultants.

The Department contacted other State agencies and found that the Board of Nursing performs educational program oversight and approval functions similar to those that the

Radiologic Technology Board of Examiners performs. The Board of Nursing charges fees to approved schools for application review and for annual monitoring functions. In addition, the national certifying body of radiologic technology programs, the Joint Review Committee on Education in Radiologic Technology (JRCERT), charges fees for all services it provides to its accredited programs. The Department's proposed fees for the same services are equivalent to or less than the fees assessed to radiologic technology programs by JRCERT. The proposed new fees collected from radiologic technology schools will partially fund the new inspector to be hired by the Technologist Certification Section. The educational schools and the students will benefit from the addition of the new full time inspector because the additional personnel will enable the Department to review applications more quickly, and investigate student complaints against approved schools sooner. Schools that seek both New Jersey and national accreditation would pay fees to both entities to obtain and maintain the respective certifications.

Below is a summary of each section of proposed new N.J.A.C. 7:28-19.

N.J.A.C. 7:28-19.1 Purpose, scope and applicability

Proposed N.J.A.C. 7:28-19.1(a) defines the purpose of the subchapter, which is to prohibit unnecessary ionizing radiation exposure and to prevent improper exposure of humans to ionizing radiation, as set forth in the Radologic Technologist Act, N.J.S.A. 26:2D-24. Proposed N.J.A.C. 7:28-19.1(b) identifies the individuals or entities that are subject to the subchapter and expands the scope of the rules to include a new type of radiologic technologist professional, the radiologist assistant (RA). New Jersey has not previously regulated the profession of RA,

although there is national certification available for radiologic technologists who complete additional education and pass a certification examination.

Proposed N.J.A.C. 7:28-19.1(c) exempts certain individuals from the licensure requirements of this subchapter; however, these individuals are required to comply with all other provisions of this subchapter unless specifically exempted. Those exempted from the licensing requirements are a licensed practitioner operating within the scope of his or her license; a dental hygienist operating within his or her scope of practice and registered with the New Jersey State Board of Dentistry; a person enrolled and attending a school or college of medicine, osteopathy, chiropody, podiatry, chiropractic, dentistry or dental hygiene, while acting within the school's curriculum and under appropriate supervision; and a student enrolled in a Board-approved school of radiologic technology, who is acting within the school's curriculum and under appropriate supervision. Existing N.J.A.C. 7:28-19.3 allows licensed practitioners, as defined at existing 19.2, to use x-rays on humans without obtaining a separate radiologic technologist license. Students in an approved program of radiologic technology may also expose human beings to ionizing radiation, under certain circumstances, under the existing rules. See existing N.J.A.C. 19.10 (identifying when a student may use medical ionizing equipment). The existing rules do not require dental assistants to take the Board's examination in order to qualify for a license, provided that the assistant has an appropriate certification from the New Jersey Board of Dentistry. See existing N.J.A.C. 7:28-19.4(e).

In accordance with proposed N.J.A.C. 7:28-19.1(d) the subchapter does not apply to the use of ionizing radiation in veterinary medicine or in the examination of deceased humans, since these exposures do not concern patient health and safety. The health and safety provisions for all operators of ionizing radiation-producing equipment are established elsewhere in N.J.A.C. 7:28.

See N.J.A.C. 7:28-6, 7 and 8. The public is also afforded protection from radiation exposure under N.J.A.C 7:28-6; nuclear medicine technologists are not covered by the proposed subchapter. Proposed N.J.A.C. 7:28-19.1(e) provides that nuclear medicine technologists are subject to the requirements of N.J.A.C. 7:28-24. The use of ionizing radiation-producing equipment that is regulated under N.J.A.C. 7:28-17, 20, and 21 are also not regulated under the proposed subchapter.

N.J.A.C. 7:28-19.2 **Definitions**

Proposed N.J.A.C. 7:28-19.2 defines terms used throughout the subchapter. The definitions of Board, Commission, Commissioner, and Department are in the existing rules at N.J.A.C. 7:28-19.2. "Chest radiologic technologist (LRT(C))," "dental radiologic technologist (LRT(D))," "diagnostic radiologic technologist (LRT(R))," "orthopedic radiologic technologist (LRT(O))," "podiatric radiologic technologist (LRT(P))," and "urologic radiologic technologist (LRT(U)" are professions that are defined in the existing rules; however, the proposed definitions are not identical to the existing definitions, inasmuch as the proposed definitions update the terminology as used in the industry, and also refer to the location in the proposed subchapter where each profession is discussed. In addition, the Department proposes to replace the term "radiation therapy technologist (LRT(T))" with the globally accepted term for the profession, "radiation therapist (LRT(T))." The definition of this profession is continued without change from existing rules. Similarly, the definitions of "JRCERT" and "radiologic technology" are proposed to be updated. The proposed acronym, "JRCERT," is changed from "JRC/ERT" in the existing rules, to reflect the acronym that the Joint Review Commission itself uses. See http://jrcert.org. The proposed definition of "radiologic technology" no longer contains the

limitation that the ionizing radiation be used under the supervision of a licensed practitioner.

The definitions of "license," "licensed practitioner," and "student" have also been updated from the existing rules.

The proposed new term "crime" is defined in this subchapter to be any act that violates a law that is defined as a crime by New Jersey Code of Criminal Justice (N.J.S.A. 2C:1-4(a)) or the equivalent under Federal law or the laws of any state.

The proposed new terms "direct supervision" and "indirect supervision" are used to describe the level of required supervision of a student while performing radiological procedures, and are derived from JRCERT definitions.

The proposed new terms "probationary approval" and "provisional approval" are used to describe levels of Board approval when full Board approval has not been obtained. These terms are derived from the Board's past practice in approving radiologic technology programs.

The proposed new term "non-invasive fluoroscopic procedure" is used by the American College of Radiology in describing those fluoroscopic procedures that can be performed by a radiologist assistant in the United States barring restrictions placed by individual states. The New Jersey Board of Medical Examiners will define what fluoroscopic procedures are non-invasive and thereby which procedures are permitted to be performed by a radiologist assistant in New Jersey.

The proposed new terms "clinical education center," "engage," "ionizing radiation," "ionizing radiation-producing equipment," "limited license," "operate ionizing radiation-producing equipment," "position patients," "radiological examination," "radiologist," "temporary license," and "unnecessary ionizing radiation," are defined based upon common usage in the radiologic industry.

The proposed new term "radiologist assistant" refers to the newly recognized professional discussed above. Such an individual is a licensed diagnostic radiologic technologist who completes additional training in a specified curriculum and becomes certified upon successful completion of a national examination. The proposed new definitions of the "Radiation Protection Act" and the "Radiologic Technologist Act" refer to the respective citations in the New Jersey statutes.

N.J.A.C. 7:28-19.3 General provisions

Proposed N.J.A.C. 7:28-19.3(a) prohibits anyone from practicing radiologic technology or operating ionizing radiation-producing equipment for a mammographic procedure, unless he or she is properly licensed, or is excepted from the licensing requirements. A person who performs mammographic procedures must also meet the radiological technologist personnel requirements of the Mammography Quality Standards Act and regulations (42 USC §263b and 21 CFR Part 900).

Proposed N.J.A.C. 7:28-19.3(b) and (c) limit the operation of ionizing radiation-producing equipment to only licensed individuals, and make it improper for an owner, licensed practitioner or registrant of the equipment to allow an unlicensed person to engage in the practice of radiologic technology.

Moreover, in furtherance of the subchapter's goal of limiting human exposure to unnecessary ionizing radiation, proposed N.J.A.C. 7:28-19.3(d) prohibits a radiologic technologist from being in the primary beam, unless he or she is wearing appropriate protective garments. Proposed N.J.A.C. 7:28-19.3(h) prohibits the use of the equipment in a manner that would expose humans to unnecessary ionizing radiation.

Under proposed N.J.A.C. 7:28-19.3(e), an owner, licensed practitioner or registrant is prohibited from allowing a radiologic technologist to perform mammography procedures unless the technologist meets the requirements of the proposed subchapter, which include, as noted above, compliance with requirements of the Mammography Quality Standards Act (42 U.S.C. 263b) and 21 CFR Part 900.

Proposed N.J.A.C. 7:28-19.3(f) and (g) prohibit a school of radiologic technology from enrolling students unless the school is Board approved, and from advertising itself to be a Board-approved school if it is not. This codifies current Board standards, and is intended to protect students from loss of tuition and academic time if a program is not, in fact, Board-approved.

Under proposed N.J.A.C. 7:28-19.3(i), a licensed technologist must produce his or her licenses, if requested. This relaxes existing requirements, which require a licensee to carry the license on his or her person at all times. The Commission and the Department are proposing to relax this notification requirement because there are circumstances where it is not possible for the licensed technologist to wear the license in the work place, including sterile environments such as operating rooms.

Under proposed N.J.A.C. 7:28-19.3(j), in order that the Department is able to evaluate the ongoing qualification of its licensees, a licensed technologist must notify the Department within 30 days if he or she has been convicted of a crime under either Federal or any state's law. This requirement is intended to ensure that all licensees continue to meet the requirement of good moral character as required by the Radiologic Technology Act. In the majority of past cases, the Board has not taken action against a licensed radiologic technologist for a crime committed outside the work place, unrelated to the performance of his or her duties as a radiologic technologist, which is consistent with proposed N.J.A.C. 7:28-19.3(k). A crime committed while

a person is not engaged in the practice of radiologic technology will not necessarily result in a finding of a lack of good moral character.

Proposed N.J.A.C. 7:28-19.3(*l*) prohibits any individual or organization from training an unauthorized person in the operation of ionizing radiation-producing equipment. The Commission and the Department have become aware of manufacturers and suppliers that have trained unlicensed individuals to use the equipment. The Commission and the Department believe that prohibiting this practice will help prevent the illegal use of x-ray equipment and enhance protections to individuals who receive radiological examinations.

The ionizing radiation-producing equipment can be used for none but the specific purposes identified in proposed N.J.A.C. 7:28-19.3(m). By limiting the purposes for which radiation may be used, the Department and the Commission intend to further limit human exposure to unnecessary ionizing radiation.

Under proposed N.J.A.C. 7:28-19.3(n) and (o), a radiologic technologist cannot prescribe a radiological examination, nor can he or she render an interpretation of a radiological examination. These two functions are outside the scope of practice of a radiologic technologist.

Proposed N.J.A.C. 7:28-19.3(p) permits the Board to suspend or revoke the license of a radiologic technologist or censure or otherwise discipline a radiologic technologist if the Board finds that the technologist has committed an act of unethical conduct, as defined in proposed N.J.A.C. 7:28-19.5, or has committed any of the enumerated acts in N.J.S.A. 26:2D-34(a). The Board's authority to take such action is provided by N.J.S.A. 26:2D-34(a) and 36. Additionally, the procedures elsewhere in the subchapter to appeal Board actions are cross-referenced.

N.J.A.C. 7:28-19.4 Scopes of practice

Proposed N.J.A.C. 7:28-19.4 delineates the activities that a licensee of the various disciplines of radiologic technology may perform. Proposed N.J.A.C. 7:28-19.4(a) mandates that each person who holds a valid license in radiologic technology must use proper principles of radiation protection during a radiological examination. These principles are taught as part of the Board's approved educational curriculum in radiologic technology and include, but are not limited to, appropriate positioning of equipment, limiting the radiation exposure to the clinical area of interest, use of proper protective garments, and using equipment properly, in order to minimize human exposure to ionizing radiation.

Each of the seven licensure categories at proposed N.J.A.C. 7:28-19.4(b) through (h) has its own specific scope of practice. In developing these practices, the Board reviewed its requirements for examination and licensure to ensure that these tasks are appropriate and can be competently performed by a licensed radiologic technologist in that licensure category.

Proposed N.J.A.C. 7:28-19.4(b)1 through 7 identify specific tasks that any individual licensed in accordance with proposed subchapter 19 may perform. Proposed N.J.A.C. 7:28-19.4(b)6 codifies existing Board policy regarding the use of fluoroscopic equipment by a diagnostic radiologic technologist. The Commission and the Department, with input from the Board, have determined that it is appropriate for a licensed diagnostic radiologic technologist to assist in fluoroscopic procedures provided that a licensed physician is physically in the room and directing the procedure. Proposed N.J.A.C. 7:28-19.4(b)7 permits as part of the diagnostic radiologic technologist's scope of practice the administration of contrast media and pharmaceuticals provided that the materials used and their administration complies with the State Board of Medical Examiners' regulations at N.J.A.C.13:35-6.20.

Proposed N.J.A.C. 7:28-19.4(c) delineates the scope of practice for radiation therapy technology. The practice includes the use of fluoroscopic therapy simulators. Due to the additional education they receive in fluoroscopy, licensed radiation therapists are permitted to use fluoroscopy during therapy simulation without a licensed physician in the room; however, a licensed physician must order the procedure and be on-site during the procedure.

The scopes of practice for chest, dental, orthopedic, podiatric and urologic radiologic technology are set forth in proposed N.J.A.C. 7:28-19.4(d) through (h). These scopes of practice are intended to ensure that only those procedures that have been taught in an approved school curriculum and for which students have been tested for competency are practiced on humans.

N.J.A.C. 7:28-19.5 Unethical conduct

Through proposed N.J.A.C. 7:28-19.5, the Commission and the Department intend to codify acts that are considered unethical conduct, and expand upon the definition contained in existing N.J.A.C. 7:28-19.2. The proposed rules do not define "unethical conduct" in the definitions at N.J.A.C. 7:28-19.2. Instead of listing the acts in the definition, the Department proposed to discuss them at N.J.A.C. 7:28-19.5.

If the Board determines, in accordance with N.J.S.A. 26:2D-34b, that a licensee has committed an act of unethical conduct, he or she is subject to sanction, and his or her license could be subject to suspension or revocation pursuant to N.J.S.A. 26:2D-34a and 36.

Proposed N.J.A.C. 7:28-19.5(b) creates a rebuttable presumption that a person whom the Board has determined committed any act of unethical conduct, or who is convicted of a crime involving moral turpitude is not of good moral character. Good moral character is a requirement for examination, initial and continued licensing, or license renewal eligibility. A person may

rebut the presumption by, for example, demonstrating to the satisfaction of the Board that he or she is of good moral character. A person may appeal any board finding by following the procedures set forth at N.J.A.C. 7:28-19.17.

N.J.A.C. 7:28-19.6 Requirements of applicants for the licensing examination

Proposed N.J.A.C. 7:28-19.6 specifies the prerequisites to qualify to take the various radiologic technologist examinations. Proposed N.J.A.C. 7:28-19.6(a) and (b) continue the requirements of existing N.J.A.C. 7:28-19.4(a) and (b). The Board has determined that a 12-month radiation therapy technology course of study that requires satisfactory completion of a 24-month course of study in diagnostic radiologic technology or its equivalent is the equivalent of a 24-month course of study in radiation therapy technology, which determination is explicitly reflected in proposed new (b)2. The existing rule provides the substitution of an "equivalent [course of study] as determined by the Board." Proposed N.J.A.C. 7:28-19.6(c) provides that the Board may determine that a person is not eligible to sit for examination if that person does not meet the eligibility requirements contained in (a) and (b) or has violated any provision of chapter 28, the Radiation Protection Act, or the Radiologic Technologist Act. Additionally, procedures to appeal Board actions are referenced.

A person who fails a particular examination may take that examination again, in accordance with proposed N.J.A.C. 7:28-19.6(d). In the interim, if the person has a valid temporary license for that scope of practice (in accordance with N.J.A.C. 7:28-19.8), he or she may continue to practice in accordance with that license. Proposed N.J.A.C. 7:28-19.6(e) requires a person who fails a particular exam three times to provide proof of having taken a remedial course that covers the areas of low performance before taking the examination again.

Although it is not necessary for the student to take the course at a Board-approved school, as a practical matter, the student will likely return to his or her Board-approved school. However, tutoring by a licensed practitioner or radiologic technologist or enrollment in an on-line course in radiologic technology would also satisfy the requirement.

If a person fails the examination a fourth time, proposed N.J.A.C. 7:28-19.6(f) requires the person to re-enroll and complete an appropriate remedial course of study determined by the school, based on the school's evaluation of the student's deficiencies. There is no set program for the course of study; rather, the school will tailor the coursework based upon the areas in which the student's test results indicate additional study is necessary. This remedial course must occur in a Board-approved school of radiologic technology or its equivalent as determined by the Board, and within a timeframe determined by the school. Existing requirements on examination do not limit the number of attempts by an examinee to successfully pass the examination. The American Registry of Radiologic Technologists (ARRT) limits its candidates to four attempts to obtain certification in radiologic technology. After a fourth failure, the AART candidate must re-enroll in a JRCERT approved program and complete a remedial course of study. Thereafter, the JRCERT approved program would certify the candidate as eligible to retake the ARRT certification examination. The proposed limitations in this rule are consistent with national certification practices.

N.J.A.C. 7:28-19.7 Requirements of applicants for licensure

Proposed N.J.A.C. 7:28-19.7 establishes the requirements a person must meet to qualify for licensure in the various disciplines of radiologic technology. Proposed N.J.A.C. 7:28-19.7(a) through (c) require an applicant for licensure to meet the application requirements of proposed

new N.J.A.C. 7:28-19.6(a) and (b), and to have passed the appropriate examination (or equivalent) for his or her particular scope of practice, and furthers the goal of having only qualified persons operate ionizing radiation-producing equipment.

Proposed N.J.A.C. 7:28-19.7(d) specifies that the Board may deny licensure to an applicant who does not meet the eligibility requirements of (a), (b) and (c) or has violated any provision of this chapter or the Radiologic Technologist Act. This provision codifies Board practices regarding the issuance of radiologic technology licenses. Additionally, procedures to appeal Board actions are referenced.

N.J.A.C. 7:28-19.8 Temporary, conditional and restricted licenses

Proposed N.J.A.C. 7:28-19.8 establishes the parameters under which the Board may issue a temporary license or place conditions or restrictions on a license. In proposed N.J.A.C. 7:28-19.8(a), the Commission and the Department are proposing to permit the issuance of a temporary license to an individual who has applied for a license in diagnostic radiologic technology or radiation therapy technology, if special circumstances exist such that the temporary license is justified. In order to apply for a license, which is a prerequisite to obtaining a temporary license, a person must have graduated from a Board-approved diagnostic radiologic technology or radiation therapy technology program or its equivalent, as determined by the Board. For example, the Board could issue a temporary license to a graduate of a Board-approved diagnostic radiologic technology or radiation therapy program when the applicant presents a signed form from the program director of the school indicating successful completion of the program, as well as proof from the testing agency that the graduate has registered to take the examination. This

permits the recent graduate to obtain employment while he or she waits for the results of the examination.

The Board can issue a temporary license when the Board finds that such issuance does not violate the purpose of the Radiologic Technologist Act or endanger the public. This provision differs from existing N.J.A.C. 7:28-19.4(i). Although the existing rule and the proposed rule both provide for a temporary license, the commencement date and duration of the license differs between the existing and the proposed rules. Specifically, the proposed rule provides that the temporary license will expire 90 days after applicant's successful completion of the appropriate course of study. The existing rule provides that a temporary license will expire 90 days after the date of the examination, and can remain in effect for no more than 180 days. The Department and the Commission are proposing this change because computerized examinations (which are now the standard) provide the applicant with more timely results, and afford the applicant the ability to take the examination multiple times during the 90-day period, if necessary. The Department and the Commission propose to allow an individual to receive only one temporary license for the same license category, rather than two, as in the existing rules. Again, because computerized testing allows an applicant to take an examination multiple times during the period of the temporary license, rather than only on specific days when the examination is given, an applicant can take the examination multiple times without requiring more than one temporary license.

Proposed N.J.A.C. 7:28-19.8(b) provides that the Board may place conditions or restrictions on a technologist's license as a form of sanction, short of suspending or revoking the license. Examples of conditions that the Board may place on a license include a requirement to complete an ethics training class within a certain period of time, or a requirement to fulfill the

stipulations of a court order. An example of a restriction that the Board may place on a license includes a prohibition on supervising student technologists for a specified period of time. The Board has taken such action in the past when a licensee has committed an improper act that did not warrant the suspension or revocation of the license. Such actions by the Board are permitted by the Radiologic Technology Act at N.J.S.A. 26:2D-34(a).

Proposed N.J.A.C. 7:28-19.8(c) prohibits a person from practicing radiologic technology outside of the conditions or restrictions that the Board has placed on the license.

N.J.A.C. 7:28-19.9 License expiration, reissuance and renewal

Proposed N.J.A.C. 7:28-19.9(a) and (b), which are based upon existing N.J.A.C. 7:28-19.3(a) and 19.4(f), make clear that, unless otherwise exempted, only those persons with a valid license issued under these rules may practice radiologic technology in New Jersey. A license is valid for up to two years, depending on when it is issued. For example, a new or reissued license is effective as of the date it is issued or reissued. A renewed license begins on the January 1 of an odd numbered year (such as January 1, 2007). All licenses (new, reissued or renewed) expire on December 31 of the following even numbered year (for example, December 31, 2008), no matter when they were issued. Accordingly, a license issued (or reissued) in June 2008 will expire on December 31, 2008, even though that period is less than two years. The licensee would renew his or her license effective January 1, 2009, which license would then be valid until December 31, 2010.

Proposed N.J.A.C. 7:28-19.9(c) is new and requires a licensee to notify the Department of any change in name or address within 30 days of such changes. Timely updates of licensee

information permits the Department to mail pertinent documents, including license renewal forms and license documents, to the appropriate person and location.

A license must be renewed before expiration in order to remain effective. See proposed N.J.A.C. 7:28-19.9(d). Proposed N.J.A.C. 7:28-19.9(e) provides that the Board may deny renewal of a license if the applicant is determined not to be of good moral character or has violated any provision of the subchapter or the Radiologic Technologist Act. Additionally, procedures to appeal Board action are referenced.

Proposed N.J.A.C. 7:28-19.9(f) incorporates the provisions of N.J.S.A. 26:2D-33b regarding reissuance of an expired license, and clarifies how the Department calculates the fee due. The proposed fees are lower than under the existing rules, in certain circumstances. A technologist whose license has expired, but has not performed the duties of a radiologic technologist in New Jersey during the period that the license was expired, need only submit a fee for the current period. Fees do not have to be submitted for past periods in these circumstances. If an individual has performed the duties of a radiologic technologist in New Jersey during the period that the license was expired, past years' fees as well as current fees must be submitted with the application for reissuance. In this instance, the technologist is also subject to sanctions for practicing radiologic technology without a license.

Under existing Board interpretation of N.J.S.A. 26:2D-33b, which states that "any outstanding fee must be paid," fees are be assessed for the entire period that the license was expired, regardless of the circumstances. Therefore, if a license has been expired for two years and the person wishes to have the license reissued, the person must pay the fees for the two expired years before the license will be reissued. Proposed N.J.A.C. 7:28-19.9(g) is based on N.J.S.A. 26:2D-33b and specifies that any license expired five years or longer cannot be

reissued. A technologist wishing to resume the practice of radiologic technology, but whose license has been expired for five years or more, must apply in the same manner as someone who has not previously received a license.

N.J.A.C. 7:28-19.10 Fees

Proposed N.J.A.C. 7:28-19.10 establishes fees for various services provided to licensees and educational programs by the Department. Proposed N.J.A.C. 7:28-19.10(a) continues existing N.J.A.C. 7:28-19.12(a), but with increased fees to the applicants. Examination application fees are proposed to be increased from \$60.00 to \$160.00. License Application fees are proposed to be increased from \$40.00 to \$60.00 and License Reissuance and Renewal fees are proposed to be increased from \$50.00 to \$90.00. License replacement fees remain unchanged at \$20.00. The basis for these proposed fees are discussed in the Economic Impact below.

Proposed N.J.A.C. 7:28-19.10(b) establishes new fees for schools of radiologic technology that make application to obtain Board approval. There is no similar fee in the existing rules. The application fee varies depending on the discipline of radiologic technology in which the application is made. Fees for diagnostic radiography and radiation therapy applications are higher than those for dental and limited radiography programs because the documentation and time to review such information are substantially greater. The basis for these proposed fees is discussed in the Economic Impact below.

Proposed N.J.A.C. 7:28-19.10(c) establishes annual fees for Board-approved schools.

These fees vary depending on the discipline in which the school is approved. As discussed in the Economic Impact, below, these fees cover the costs of services provided by the Department to

conduct on site compliance investigations, complaint investigations, review of clinical affiliate sites and program personnel to ensure that they meet Board standards and other related services.

Proposed N.J.A.C. 7:28-19.10(d) specifies acceptable payment methods for the above proposed fees and that all fees submitted to the Department are non-refundable. Proposed N.J.A.C. 7:28-19.10(e) specifies the mailing address where all license renewal fees and applications and program annual fees are to be submitted. Proposed N.J.A.C. 7:28-19.10(f) specifies the mailing address where all applications other than license renewal or reissuance applications, and fees for examination, license application, license reprint and new school application fees are to be submitted.

N.J.A.C. 7:28-19.11 Minimum requirements for admission to a school of radiologic technology

Proposed N.J.A.C. 7:28-19.11(a) specifies the minimum requirements that a person must meet for admission into a Board-approved school of radiologic technology. The requirements are similar to those at existing N.J.A.C. 7:28-19.8(a); however, the proposed rule differs from the existing rule in that it regulates the school, rather than the proposed student. Proposed N.J.A.C. 7:28-19.11(a) also requires a school to enroll only those students that have met the school's admission requirements. Proposed N.J.A.C. 7:28-19.11(b) and (c) are similar to existing N.J.A.C. 7:28-19.8(b). Proposed N.J.A.C. 7:28-19.11(b) and (c) specify that the school must require a formal application from each student, and must keep the application and eligibility information on file for a minimum of two years after the student has graduated, withdrawn, or been dismissed from the program. The Department reviews student admission records during on

site compliance evaluations to ensure that programs are in compliance with Board-approved admission requirements. The Commission and the Department believe that a two-year record retention period is sufficient for the Department to ascertain compliance in this area; moreover, the period is consistent with record keeping requirements of other subchapters of N.J.A.C. 7:28. For example, quality assurance regulations contained in N.J.A.C. 7:28-22.5(j) and (k), 22.6(j) and (k), 22.7(k) and (l) each contain a two-year record retention requirement.

N.J.A.C. 7:28-19.12 Requirements for students engaging in the scope of practice of radiologic technology

Proposed N.J.A.C. 7:28-19.12(a) continues the requirements of existing N.J.A.C. 7:28-19.10(a), which permit students enrolled in Board-approved radiologic technology schools to use ionizing radiation-producing machines on patients while under appropriate supervision. Proposed N.J.A.C. 7:28-19.12(b) specifies the level of supervision that a licensed practitioner, registered dental hygienist or licensed radiologic technologist must provide to a student technologist as he or she progresses through a radiography program's curriculum. The level of supervision is reduced as the student demonstrates competence in each required procedure. The two levels of supervision, "direct" and "indirect," defined at proposed N.J.A.C. 7:28-19.2, are derived from Board Competency Based Clinical Education (CBCE) standards which can be obtained by contacting the Department's Bureau of Radiological Health at the address specified in N.J.A.C. 7:28-19.10(f). Proposed N.J.A.C. 7:28-19.12(b) also specifies the student activities that are to be supervised by the individuals listed above.

Proposed N.J.A.C. 7:28-19.12(c) delineates the responsibility of the radiologic technology school and the clinical education center in assuring that appropriate levels of

supervision are provided to students. For diagnostic radiologic technology students, the level of supervision is based on a student's demonstrated competency level and is derived from Board CBCE standards. A student must receive direct supervision by a licensed diagnostic radiologic technologist prior to the student's demonstrating competency in a particular procedure. Once the instructor determines a student is competent in a given procedure, the student may perform the procedure under the indirect supervision of a licensed diagnostic radiologic technologist.

Diagnostic radiologic technology students are not permitted to position a fluoroscopic image intensifier or initiate fluoroscopic x-ray production during fluoroscopic procedures. Student diagnostic radiologic technologist are permitted to select fluoroscopic technique factors, initially position the fluoroscopic image intensifier prior to the initiation of fluoroscopic x-rays, and take overhead radiographic images while under the supervision of a licensed diagnostic radiologic technologist who is under the direction of a physician. The proposed activities are consistent with existing Board standards regarding the use of fluoroscopic equipment.

A radiation therapy student must be directly supervised by a licensed radiation therapist at all times. The proposed standard is derived from national Joint Review Committee on Education in Radiologic Technology (JRCERT) standards. A limited curriculum radiologic technology student must be directly supervised by a licensed practitioner, a licensed diagnostic radiologic technologist, or a person licensed in the specific limited category of radiologic technology that the student is studying. These requirements are derived from Board standards. A dental radiography student must be directly supervised by a licensed dentist, a registered dental hygienist, a licensed diagnostic radiologic technologist, or a licensed dental radiologic technologist. These requirements are derived from Board standards.

Proposed N.J.A.C. 7:28-19.12(c) also makes schools and clinical sites (such as a hospital or doctor's office) responsible for ensuring that a student is not assigned to clinical education rotations in a manner that permits the student to substitute for a licensed radiologic technologist. The school and clinical site must also ensure that Board-approved student capacities of clinical education centers are not exceeded. Students must wear identification badges that identify them as students while engaging in clinical activities, and they must wear a personnel radiation-monitoring device while engaging in clinical activities and all clinical education activities. Clinical education activities must also comply with the school's published policies and procedures and the written agreement between the school and clinical education center. These requirements are derived from existing Board standards.

Proposed N.J.A.C. 7:28-19.12(c)11, which prohibits specific activities that could result in a student receiving inappropriate exposure to radiation, incorporates existing N.J.A.C. 7:28-19.8(e)2.

N.J.A.C. 7:28-19.13 Requirements for schools of radiologic technology

Proposed N.J.A.C. 7:28-19.13(a) and (b) continue the requirement of existing N.J.A.C. 7:28-19.9(a) and (c) that courses of study in diagnostic radiologic technology and radiation therapy technology must be at least 24 months in length, or an equivalent amount of time. Proposed amendments to the rules include specific minimum curriculum requirements for schools of diagnostic radiologic technology and radiation therapy technology, including the requirement that the course of study be a JRCERT-recognized curriculum (rather than a course of study certified by the Committee on Allied Health Education Accreditation, in the existing rule). These requirements are derived from national standards published by the American

Society of Radiologic Technologists (ASRT) and adopted as the Board's standards for curriculum requirements. As with any school covered under N.J.A.C. 7:28-19.3, if the curriculum for a school of diagnostic radiologic technology does not meet the required standards of the proposed section, the Board shall not approve the curriculum, and the school's program will not be Board approved for purposes of this subchapter.

Proposed N.J.A.C. 7:28-19.13(b) continues the requirements of existing N.J.A.C. 7:28-19.9(c) and specifies the minimum curriculum requirements for schools of radiation therapy technology. These requirements are derived from national standards published by the ASRT and adopted as the Board's standards for curriculum requirements. Proposed N.J.A.C. 7:28-19.13(c) requires schools of dental radiologic technology to follow the Board's curriculum in dental radiologic technology. This subsection also suggests the American Dental Association's approved curriculum as an acceptable guideline. Proposed N.J.A.C. 7:28-19.13(d) requires schools of podiatric radiologic technology to follow the Board's curriculum in podiatric radiologic technology. This subsection suggests the American Podiatric Medical Assistants Association's approved curriculum as an acceptable guideline. Proposed N.J.A.C. 7:28-19.13(e) requires schools of chest, orthopedic or urologic radiologic technology to follow the Board's curriculum or a nationally recognized curriculum recognized by the Board in that category of radiologic technology.

Proposed N.J.A.C. 7:28-19.13(f) establishes specific requirements for all schools of radiologic technology. In addition to meeting the Board's accreditation standards, each school must maintain current and accurate syllabi, and appoint only Board-approved faculty. The school must provide to each candidate for admission a current course catalogue or written description of the curriculum, and give each enrolled student written materials that describe the

program and policies of the school, including conduct, dismissal, grading, and pregnancy (as it relates to radiation protection). These are required in order that prospective and enrolled students know what is required of them during the course of their education. Only those students that meet the school's admission requirements may be enrolled in the school's program.

As is required under existing N.J.A.C. 7:28-19.8(c), once a student enrolls in the school, the school must provide the Department with the student's information. Similarly, the school must notify the Department when the student completes the course of study. This allows the Department to maintain current records.

In accordance with the Board's requirements, each school must comply with its plan for instruction and clinical assignments appropriate to the student's field of study, and maintain records identifying the student's education, including transcripts and clinical records. If a student does not complete the course of study, the school must maintain his or her academic and clinical records for only six months. The school must also provide adequate faculty, staff, and resources to support all of the enrolled students.

To ensure that a student's radiation exposure does not exceed established limits, the school must provide each enrolled student with a personnel radiation-monitoring device. The school must inform each student of his or her radiation exposure within 30 days of the school's receipt of a monitoring report. Student exposure is limited to the amount set forth at N.J.A.C. 7:28-6.1. In addition, the proposed rules establish periodic monitoring levels that, when exceeded, require the school to investigate the cause of the exposure. The periodic levels that trigger a school's investigation are 50 mrem in one month, 100 mrem in two months and 150 mrem in a calendar quarter or any exposure that exceeds the limits specified at N.J.A.C. 7:28-6.1. The trigger limits established in proposed N.J.A.C. 7:28-19.13(f)13 are derived from

recommended maximum embryo-fetus exposure limits established by the National Council on Radiation Protection, Report #116. The Commission and the Department propose these national exposure limits to ensure maximum protections to female students while participating in clinical and laboratory instruction who may be pregnant and unaware of their pregnancy. By establishing these limits for the student technologist, the Commission and the Department are ensuring that the students receive the maximum protection currently recommended to the most sensitive human population, the embryo-fetus. A school has 30 days to complete its investigation of exposure. If the school receives an occupational exposure report that exceeds the limits specified at N.J.A.C. 7:28-6.1, a copy of the report must be forwarded to the Department. A school must provide a complete radiation exposure history to each student within 90 days of the student's departure from the school.

If a student declares her pregnancy in writing, with an approximate date of conception, the school must provide the student with instruction regarding radiation exposure risks to the embryo-fetus, and give the student enrollment options that allow an opportunity for the pregnant student to complete the curriculum. An example of enrollment options would be to permit the student to complete the didactic portions of the curriculum, while postponing clinical education until after pregnancy. A pregnant student who elects to continue her education must wear a personnel radiation-monitoring device at waist level during the term of her pregnancy. This device will be used to predict the radiation exposure of the embryo-fetus. A pregnant student who may perform fluoroscopic or portable radiographic procedures must wear a second personnel radiation-monitoring device at neck level outside of any protective apron. This second monitor is to predict the radiation dose to the student's eyes and head. The waist level monitor is to be worn under the protective apron and is used as a first estimate of the deep dose equivalent

to the embryo-fetus. The fetal dose exposure limits contained in the proposed rules are derived from the most recent recommended limit published by the NCRP. The most recent recommendation is a monthly dose equivalent of 50 mrem and is contained in NCRP Report #116.

A school must inform a pregnant student of her monthly radiation exposure levels within seven days of the school's receipt of a dosimetry report. If the monthly limit is exceeded, the school and the student must consult with a medical or health physicist certified by a nationally recognized certifying board specified in this proposed subsection or their equivalent as determined by the Commission. A copy of the report that results from this consultation must be submitted to the student and the Department within 21 days of receipt by the school. The purpose of the consultation is to assess whether the exposure level is the result of a real occupational exposure, or if it is based on an improper use of the badge. If the exposure level is determined to be a real occupational exposure, the medical or health physicist can calculate a more accurate estimate of the fetal dose. He or she can also recommend whether student should halt or limit her occupational exposure. During the consultation, the medical or health physicist can also assess the radiation practices of the technologist and offer suggestions that could help reduce dose.

As in existing N.J.A.C. 7:28-19.8(f), the school is required to give a certificate to each student who successfully completes a course of study.

If, for any reason, the school makes a change that would affect its ability to provide appropriate didactic and laboratory instruction and clinical assignments to the students, in accordance with its approved curriculum, the school must notify the Department. Similarly, if there is a change in the way the school operates, such as a faculty member leaves or a program is

discontinued, the school must notify the Department. The notice is necessary because the Board's approval of the school's curriculum was based upon a set of circumstances. If the school changes its program, then it is possible that curriculum would no longer meet Board standards.

The proposed rules specify Board standards for schools' rates for students' passing the national American Registry of Radiologic Technologists examination in diagnostic radiography or radiation therapy. The Board may sanction a school if, for three consecutive years, at least 75 percent of its students do not pass the examination. Sanction could include the Board's revoking the school's accreditation. Similarly, the Board may sanction a school if it does not meet standards for combined mean test scores and first-time pass rates for schools offering chest, dental, orthopedic, podiatric or urologic radiologic technology curricula. For these limited radiography programs, Board standards have not been met if the school has both first-time mean scores and first-time passing percentages below 75 percent for three consecutive years.

The proposed rule, based on Board standards, requires that a student's total academic and clinical instruction does not exceed 40 hours per week.

Proposed N.J.A.C. 7:28-19.13(g) requires that, in addition to meeting the requirements of N.J.A.C. 7:28-19.13(f), schools of diagnostic radiologic technology and radiation therapy must comply with the most recent JRCERT Standards for an Accredited Educational Program in Radiologic Sciences (JRCERT Standards) as amended and supplemented. JRCERT is the only agency recognized by the United States Department of Education to accredit educational programs in radiography and radiation therapy. By requiring schools to meet the JRCERT Standards, the Department and the Commission are ensuring that approved schools are providing consistent minimum education in the profession as the profession itself has defined it. Students

of the schools can be confident that the educational program will provide them with the requisite knowledge and skills to perform the range of professional responsibilities expected by potential employers. If the JRCERT Standards conflict with this subchapter or the Board's accreditation standards, this subchapter and the Board's accreditation standards will supersede the JRCERT Standards.

N.J.A.C. 7:28-19.14 Schools of radiologic technology; process for approval; provisional approval; probationary approval; termination of approval and other general provisions

Proposed N.J.A.C. 7:28-19.14(a) specifies the process for schools that make application to become Board approved. The school must submit a complete application to the Department that complies with Board standards and submit the appropriate fee, as set forth at proposed N.J.A.C. 7:28-19.10(b). In addition, the school must submit a report (commonly referred to as a self-study report) to the Department that documents the school's compliance with proposed N.J.A.C. 7:28-19.11, 12 and 13. If the school's application is incomplete, the Department will notify the school, which will then have 90 days to provide the information. The Commission and the Department believe that 90 days is a sufficient period to allow a school to submit missing information. It is impractical for the Department to keep the application open for an indefinite period of time. Accordingly, it will forward the application to the Board for review based upon the incomplete information, if the application remains incomplete for more than 90 days. Proposed N.J.A.C. 7:28-19.14(b) provides that the Board may award approval or provisional approval to the school, or the Board may deny approval. This authority is derived from the Radiologic Technologist Act at N.J.S.A. 26:2D-29. If the school's application is denied for any

reason, proposed N.J.A.C. 7:28-19.14(c) allows the school to submit a new application, with a new application fee, for the Board's consideration. Provisional approval permits the school to advertise that it is a Board-approved school, albeit provisionally approved, and permits the school to enroll students and begin didactic instruction. In certain circumstances the Board may prohibit a school from enrolling students until certain Board conditions have been fulfilled. Furthermore, under proposed N.J.A.C. 7:28-19.14(b)1, provisional approval shall be awarded only when there is a written agreement to correct such issues within a specified time period. Applicants who fail to correct within specified time periods are subject to termination of their provisional approval.

Proposed N.J.A.C. 7:28-19.14(d) continues existing N.J.A.C. 7:28-19.9(j), and requires a school of radiologic technology and its clinical education centers to permit site inspections by the Board, the Department, or their authorized representatives. This could include an accreditation agency. The inspections are intended to allow the regulatory authority to confirm that the school has adequate administrative, clerical, clinical, faculty, financial and physical resources to support all enrolled students, and is otherwise in compliance with N.J.A.C. 7:28, the Radiation Protection Act, and the Radiation Technologist Act.

Once a school receives Board approval, it must continue to comply with the requirements of this subchapter and pay annual fees as specified at proposed N.J.A.C. 7:28-19.10(c). Annual fees are due January 1st of each year, or 30 calendar days after the school receives Board approval.

Proposed N.J.A.C. 7:28-19.14(f) specifies that the Board may reduce a school's approval status to probationary approval if a previously-approved school is found to have violated any provisions of this subchapter. This action will be taken in cases where the Board has determined

that the violations are not egregious enough to warrant termination of approval, provided the school agrees in writing to correct all deficiencies identified by the Board. The Board must notify the school of the reduction in approval status, as well as of the items of noncompliance that resulted in the probationary status. Under proposed N.J.A.C. 7:28-19.14(g), a school that is placed on probationary approval must correct all deficiencies within the time specified by the Board, notify all enrolled students and applicants by certified mail of the school's probationary approval status within 15 days of receipt of notification, and submit a copy of the notice to students to the Department within 20 days of receipt of notification. Schools are required to notify all enrolled students of any change in approval status so that they can make informed decisions regarding the continuation of their education. Applicants must also be notified so that they can make an informed decision before enrolling in the school. A school might notify applicants through a notice on the school's application materials, for example. That a school has been placed on probation may have an affect a graduate's ability to take the examination. In some instances, graduates of a program have been prevented from sitting for examination because the program did not teach the proper curriculum.

Proposed N.J.A.C. 7:28-19.14(h) specifies that the Board may terminate its approval of a school for violating any provisions of this subchapter. The Commission must approve the Board's termination of approval. The school whose approval is being terminated will be notified through an administrative order issued by the Department. The administrative order will contain the findings that led to the termination and specify its effective date. The school will have the right to appeal the Board's decision by submitting a request for an adjudicatory hearing to the Department.

Proposed N.J.A.C. 7:28-19.14(i) incorporates existing N.J.A.C. 7:28-19.9(*l*), and permits the Board to terminate a school of radiologic technology's approval if the school fails to enroll students for a period of two consecutive years. Proposed N.J.A.C. 7:28-19.14(j) permits schools whose approval status has been terminated to apply to the Board as a new school of radiologic technology. Proposed N.J.A.C. 7:28-19.14(k) requires the Board to consider an existing school that makes substantial changes to its approved program to be a new school and requires a new application and appropriate application fee be submitted to the Board for its consideration. These provisions are derived from existing Board standards.

Proposed N.J.A.C. 7:28-19.14(*l*) and (m) provide appeal rights to a school that is aggrieved by Board actions, such as denial, termination, or reduction in approval, and reference the procedures that must be followed to request a hearing.

N.J.A.C. 7:28-19.15 List of approved schools

The Department will maintain a list of all Board-approved schools and make this list available upon request. This provision was taken from existing N.J.A.C. 7:28-19.9(m).

N.J.A.C 7:28-19.16 Radiologist Assistants – schools and practice

The Department is proposing rules that recognize the advanced practice of radiologist assistant (RA). In May 2003, the American College of Radiology (ACR) and the American Society of Radiologic Technologists (ASRT) announced the creation of this new healthcare position. The ACR defines the RA as a diagnostic radiologic technologist who has completed additional education in an RA curriculum and has passed a certifying RA examination. The American Registry of Radiologic Technologists published a list of tasks that a radiologist can

delegate an RA to perform. Proposed N.J.A.C. 7:28-19.16(a) establishes the educational and prerequisite licensing requirements for RAs who practice in New Jersey, and permits an RA to perform non-invasive fluoroscopic procedures under the supervision of a radiologist. The State Board of Medical Examiners is the body charged with designating the procedures deemed "non-invasive," and the appropriate level of supervision.

Proposed N.J.A.C. 7:28-19.16(b) specifies the minimum curriculum content necessary for an RA school to be recognized by the Board. The curriculum listed in this subsection is identical to the current national curriculum specified by the ASRT. This subsection permits schools to utilize other nationally recognized curricula, provided that the curriculum chosen contains the minimum content specified in this subsection. Proposed N.J.A.C. 7:28-19.16(c) requires an RA to comply with all other State regulations regarding his or her practice in New Jersey. One example would be the rules of the Board of Medical Examiners at N.J.A.C. 13:35.

Proposed N.J.A.C. 7:28-19.16(d) permits an RA student to perform non-invasive fluoroscopic procedures as part of the student's clinical education, provided that the student is currently enrolled in a Board recognized school, is acting within the curriculum of the school, possesses a valid diagnostic radiologic technology license issued by the Board and is under the appropriate level of supervision as specified in proposed N.J.A.C. 7:28-19.16(g)6.

Proposed N.J.A.C. 7:28-19.16(e) prohibits unqualified individuals from performing non-invasive fluoroscopic procedures. Similarly, proposed N.J.A.C. 7:28-19.16(f) prohibits licensed practitioners (defined at proposed 19.2), and owners or registrants of ionizing radiation-producing equipment from allowing unqualified personnel to perform non-invasive fluoroscopy. These prohibitions are intended to protect patients and unqualified operators from unnecessary radiation exposure during non-invasive fluoroscopic procedures.

Proposed N.J.A.C. 7:28-19.16(g) establishes requirements for RA schools that assign students to New Jersey facilities for clinical education. Any such school must be recognized by the Board, ensure that assigned students possess and maintain a valid diagnostic radiologic technology license issued by the Board, and develop and implement a log to track student performance in fluoroscopic procedures. The school must track the name of the student, the procedure performed, the name of the supervisor responsible for the procedure, the type of supervision provided and the fluoroscopic time used during the procedure. Any unusually high fluoroscopic times must be identified, corrective actions must be implemented and a record must be maintained in the student's file. The school must also develop and implement an educational plan for competency based clinical education. Such educational plan must include didactic and laboratory instruction, clinical practice, clinical competency testing and remedial coursework for failed competency evaluations. The school must notify the Department of the facility where the student RA is assigned for clinical education, the names of the supervising radiologists and the length of the assignment prior to the start of that assignment; and ensure that the appropriate level of supervision is provided to a student RA throughout the clinical education rotation.

Only a radiologist can determine a student RA's competency in a given fluoroscopic procedure. Until a student is deemed clinically competent in a particular procedure, a radiologist or radiologist assistant must directly supervise the student. After a student is found to be competent in the procedure, the student may perform the procedure without a supervisor present in the room, provided there is a radiologist or radiologist assistant on-site and immediately available to furnish assistance and to provide remedial instruction to the student. If the performance of the student RA is determined to be unacceptable after a student is deemed competent in the procedure, the level of supervision for that student reverts to direct supervision.

This requirement ensures that the student RA receives additional instruction and is observed performing additional procedures under direct supervision until the student RA demonstrates competency in the relevant procedure.

Proposed N.J.A.C. 7:28-19.16(h) prohibits RA schools from assigning students to New Jersey facilities for clinical education unless the school meets the curriculum requirements of proposed N.J.A.C. 7:28-19.16(b), and the clinical education requirements of proposed N.J.A.C. 7:28-19.16(g).

N.J.A.C. 7:28-19-17 Procedures for requesting and conducting adjudicatory hearings

Proposed N.J.A.C. 7:28-19.17(a) specifies the process a person must follow if aggrieved by the Board's decision regarding eligibility for examination or licensure or an application for Board-approval of a school. Proposed N.J.A.C. 7:28-19.17(b) specifies the process a person must follow if aggrieved by the Board's or the Department's action taken against a licensee, license renewal applicant or approved school. Under both proposed subsections, hearing requests must be received by the Department within 20 calendar days of the person's receipt of the Department's or Board's action. Proposed N.J.A.C. 7:28-19.17(c) permits the Department to deny hearing requests that are not filed in compliance with (a) or (b), or are not timely received.

Proposed N.J.A.C. 7:28-19.17(d) requires the Department to follow the procedures specified in the Administrative Procedure Act, N.J.S.A 52:1413-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C. 1:1, when conducting all adjudicatory hearings. Proposed N.J.A.C. 7:28-19.17(e) specifies that all hearing requests must be sent to both the Office of Legal Affairs and the Bureau of Radiological Health and specifies the address of both

offices. The proposed rules do not allow a third-party the right to a hearing, if one is not otherwise allowed. The procedures for requesting a hearing are consistent with the Department's procedure throughout its rules, and also with the Administrative Procedure Act, and the Uniform Administrative Procedure Rules.

N.J.A.C. 7:28-19.18 Severability

Under proposed N.J.A.C. 7:28-19.18, if any part of the proposed subchapter is determined to be invalid, the remaining parts of the subchapter will remain in force.

Social Impact

The Commission and the Department anticipate that the proposed rules will have a positive social impact on the citizens of New Jersey and all persons who undergo radiological procedures in New Jersey by continuing to provide protections against unnecessary radiation exposure. The proposed new rules provide such protections by regulating the education that radiologic technology students receive at Board-approved schools. The requirements include that the student must demonstrate clinical competency prior to graduation and pass a Board administered licensing examination. Protections are also afforded through the administration of a licensure program that provides consumers and employers with a mechanism to identify individuals properly qualified to perform radiological examinations.

Additionally, the proposed rules will have a positive social impact by providing protections from exposure to unnecessary radiation by prohibiting the unauthorized use of ionizing radiation-producing equipment on humans and by prohibiting manufacturers, installers, salespersons or users from training unqualified individuals in the use of x-rays on humans.

The Commission and the Department expect that the proposed rules will contribute to the safe and effective use of ionizing radiation, while adequately protecting patients, health care workers, and the general public from unnecessary ionizing radiation exposure. The United States Department of Health and Human Services' Public Health Service has listed x-rays as a "known human carcinogen" and the National Research Council's Committee on Biological Effects of Ionizing Radiation has determined that there is a potential incremental risk of cancer associated with medical radiological procedures. The proposed rules will help ensure that such risks are kept to a minimum through the mechanisms described above.

Economic Impact

These proposed rules contain increased fees for those who apply for examination, license or license renewal. These proposed increases are the first since 1990 and are needed to cover the Department's cost in providing such services. The Department anticipates that the economic impact of the proposed increases to examination, license and license renewal applicants will be minimal. The Department has researched the costs associated with administering statutorily mandated examination and licensing services and determined that the proposed new fees accurately reflect the costs incurred by the Department. The Department has statutory authority under N.J.S.A. 26:2D-9(*l*) to charge fees to cover its actual costs. The Department notes that the proposed fees are consistent with those charged by other professional licensing agencies.

The Department proposes to increase radiologic technology examination fees from \$60.00 to \$160.00. This is an increase of \$100.00. Although this increase is substantial, the following must be considered. The proposed examination fees reflect the Department's costs to administer the examination. The Board will accept certification by Dental Assisting National

Board and American Registry of Radiologic Technologists in lieu of the Board's examination. The Dental Assisting National Board charges \$150.00 for examination in dental radiography that is comparable to the Board's limited dental radiography examination. The American Registry of Radiologic Technologists charges \$150.00 for its examination in radiologic technology, which is comparable to the Board's examination in diagnostic radiologic technology.

The Department processes over 700 examination applications annually. The Department reviewed the costs associated with administering radiologic technology examinations and determined that it spends approximately \$7.25 per application for mailing, paper, phone, database, printer expenses, and similar items. In addition, the Department spends approximately one hour per application in administrative and professional staff time related to administration of the examination. This includes review of the applications to ensure eligibility to sit for examination, processing approved applications and notifying applicants of their eligibility status, communications with testing vendors and compilation of student examination results, which are reported to the Board and compared against national averages where applicable.

The average labor rate for the Department employees performing these services is \$31.45 per examination. Fringe and indirect costs per application is \$21.45 per examination. In calculating the labor rate, and fringe and indirect costs, the Department considered the average salary of the staff assigned to the activity, plus a component for direct support staff and division overhead, and fringe benefits such as pensions, health benefits, workers' compensation, disability benefits, and the employer's share of the Federal Income Compensation Act contribution. The calculations also included indirect costs, which consist of management salaries, operating expenses, divisional indirect salaries and related expenses, building rent, and the Department allocation of indirect costs listed in the Statewide Allocation Plan prepared

annually by the State Department of the Treasury. Also included in the calculation is the operational expenses attributable to the employee and the program, including postage, telephone, training, travel, supplies, equipment maintenance, vehicle maintenance and data system management. There is also included a component for legal services. Finally, the Department utilizes several testing vendors to administer the seven examinations it offers in radiologic technology. The estimated charges from testing vendors are \$100.00 per examination. The sum of the charges listed above is reflected in the proposed \$160.00 examination fee.

The proposed rules increase license and license renewal application fees charged to radiologic technologists. Initial license fees are proposed to increase from \$40.00 to \$60.00 and biennial renewal license fees are proposed to increase from \$50.00 to \$90.00. Both license and renewal licenses are valid for up to two-years. The proposed fee increases for licenses and license renewal, when considered on an annual basis, result in an annual increase of \$10.00 and \$20.00, respectively.

The Department calculated the proposed initial and renewal licensing fees in the following manner. The Department's annual costs to operate the Technologist Certification Section within the Bureau of Radiological Health is \$932,000, based on fiscal year 2005 expenditures. Revenue currently collected from examination applications in the amount of \$42,000 was subtracted from this amount. The remaining \$890,000 must be raised from initial and renewal licensing fees collected. The Department receives approximately 1,100 initial licensing applications and 9,250 renewal applications (based on 18,500 renewal applications biennially) each year. It has been a long-standing practice of the Commission and the Department to charge a lower initial licensing fee and a higher renewal licensing fee, even though the Department incurs greater expense in registering first time licensees. This practice is

born of the fact that most initial applicants are just starting in their careers and have paid for, or incurred debt to pay for the cost of education. As a result, the Department set the initial licensing fee at \$60.00. From this proposed initial licensing fee, \$66,000 will be generated annually. This revenue was then subtracted from the remaining \$890,000 annual operating cost of the Technologist Certification Section. The \$824,000 annual balance must be generated from license renewal fees. These costs when divided among the 9,250 annual renewal licenses are approximately \$90.00 per renewal license. The Department is proposing a \$90.00 license renewal fee to recoup these costs.

In addition to the increases described above, the proposed rules will have an economic impact on both new and existing radiologic technology schools. For the first time, the Department will assess fees to schools of radiologic technology that seek Board approval. The Department has the authority to charge fees to entities that receive direct services from the Department. As such, the Department must pass the costs on to schools that submit new program applications for Board approval. Although these fees present a new cost to schools establishing programs, the costs are small when compared to tuition collected. For example, using 2004 diagnostic radiologic technology student enrollment figures and school tuition data, the Department estimates that the proposed \$2,500 one time, new diagnostic radiologic technology program application fee represents 1.4 percent of the average total annual tuition collected per school.

The proposed rules will also have an economic impact on all schools with Board-approved programs. The proposed rules assess new annual fees to all Board-approved schools. These fees are necessary to recoup Department costs for activities associated with program changes. The Department services covered by the annual program fee include review of re-

accreditation self studies, onsite re-accreditation visits, updating Department records to reflect staffing changes at the regulated facility, review of new staff credentials, review and approval of changes in clinical sites, investigation of complaints against schools, faculty or clinical sites and all other activities associated with ongoing Board-approved programs. The annual fees to be assessed to approved programs will vary depending on the type of program.

The Department calculated the proposed diagnostic radiologic technology and radiation therapy program application and annual fees in the following manner. The Department reviewed the resources required to review new program applications, existing program self-study review applications, clinical site qualifications, changes to existing programs, and to conduct on-site reaccreditation visits and respond to complaints against approved programs. The Department concluded that similar staff resources are required to perform these activities at diagnostic radiologic technology and radiation therapy programs and, therefore, is proposing similar fees for each of these programs. For diagnostic radiologic technology and radiation therapy schools, an estimated 80 hours per program is spent on the activities described above.

The hourly staff rate for the employees performing these services, including fringe and indirect expenses, is \$81.86. Multiplication of the hourly rate with the staff time results in Department costs of \$6,600 per program. In addition, an on-site re-accreditation inspection is conducted once every approval period (approval ranges from three to eight years, with the majority averaging five years) and costs the Department \$800.00 per visit for contracted inspector services. This brings the Department's total costs for approving and maintaining these program approvals to \$7,400 per program. As a result, the Department is proposing to recoup these costs over a five-year period, which coincides with the average program approval period.

Under the proposed new rules, new schools will pay an initial application fee of \$2,500. Board-approved schools will pay an annual fee of \$1,000. The costs to new schools over the five-year period will be \$7,500, while the costs to Board-approved programs over the five-year period will be \$5,000.

The fees to diagnostic radiologic technology and radiation therapy programs contained in these proposed rules are comparable to those charged by other accrediting agencies. For example, the Joint Review Committee on Education in Radiologic Technology (JRCERT) charges a \$2,500 application fee for new diagnostic radiologic technology programs plus an additional fee of \$1,350 to \$2,500, depending on the number of clinical education sites contained in the application. The JRCERT also charges a \$1,500 annual fee to its diagnostic radiologic technology and radiation therapy programs, plus additional fees for on-site re-accreditation visits (\$1,000), submission of interim reports (\$750.00) and program changes (\$250.00). In addition, the JRCERT requires the school to reimburse JRCERT for all site visitor expenses associated with the on-site program evaluation. In comparison, the Department proposes to charge \$2,500 to its diagnostic radiologic technology and radiation therapy program applicants. This fee includes the costs associated with clinical site review and on-site compliance inspections. The Department's proposed annual fee of \$1,000 to Board-approved programs is less than JRCERT's \$1,500 annual fee. The Department's annual fee includes many of the activities for which JRCERT charges an additional fee, as discussed above.

The Department has determined that dental and limited scope radiologic technology program approvals require less staff time, but the same staff personnel as diagnostic and radiation therapy programs. The Department spends approximately 20 hours of staff time to review each dental or limited scope radiologic technology program application. Multiplying the

staff time by the labor rate of \$81.86 per hour equates to \$1,650 in costs to the Department per application review. The Department proposes to assess program application fees of \$1,650 to these programs.

The Department spends time maintaining existing dental and limited scope radiologic technology programs; however, the Department determined that the amount of time involved in annual program maintenance activities differ between dental and limited scope radiologic technology schools. Therefore, the Department is proposing to charge different annual program fees to these programs. The Department reviews and approves approximately 900 dental program clinical sites per year. In order to calculate the costs per program for these activities, the 900 clinical site reviews were distributed among the 40 approved dental programs, resulting in an average of 23 clinical site approvals per dental program each year. Each clinical site review takes twenty minutes of staff time to complete. Department staff salary including fringe and indirect costs required to review clinical sites at these programs is \$54.81 per hour. Multiplying the average number of sites (23) by the review time (0.333 hours) by the hourly rate (\$54.81) equals \$400.00 in costs to the Department for dental program clinical site approvals. Hence, the Department is proposing to assess an annual fee of \$400.00 to all Board-approved dental radiologic technology programs. The cost to new programs over a five-year time period will be \$3,650, while the costs for Board-approved dental programs over a five-year period will be \$2,000.

The Department has reviewed its current workload and determined that the periodic activity at limited scope radiologic technology programs is much less than that at dental programs. The Department approves an average of 20 clinical sites per year at these limited programs. It takes 30 minutes for each clinical site review, which is a more involved review than

for dental clinical sites. Averaging the 20 annual clinical site reviews over the three approved limited programs results in seven clinical site reviews per program. Multiplying this average (seven) by the time for review (0.5 hr) and the hourly staff rate (\$54.81) equals \$192.00 in Department costs per year for clinical site approvals in limited scope radiologic technology programs. The Department is proposing an annual fee to all Board-approved non-dental limited scope programs of \$200.00. The cost to new limited scope programs over a five-year time period will be \$2,650, while the costs for Board-approved limited scope programs over a five-year period will be \$1,000.

In addition to the direct costs associated with these rules, the proposed rules will have additional economic impacts to school applicants and Board-approved schools. All applicants will incur the administrative costs associated with developing a complete application to submit to the Department for Board consideration. The Department has polled existing educational programs and estimates the time to develop a complete application can range from 100 to 300 hours for limited programs, and 300 to 700 hours for diagnostic and radiation therapy programs. Salaries and staffing vary greatly from school to school, but an estimate of the hourly rate to produce these documents is \$49.00 per hour for limited programs and \$67.00 per hour for diagnostic and radiation therapy schools. This includes the costs of clerical, legal and administrative staff. Thus, the estimated costs to develop the curriculum are \$4,900 to \$14,700 for limited programs and \$20,100 to \$46,900 for diagnostic and radiation therapy programs. Both the ASRT and the Department provide curriculum guidelines at no cost, in order to assist programs in developing required curricula.

Board-approved schools will incur the costs of providing students with identification badges and film badges to monitor student radiation exposure while enrolled in the schools. The

Department estimates that identification badges cost approximately \$15.00 per student, and radiation monitoring devices average approximately \$8.00 per student per month.

Additional costs incurred by Board-approved schools include the equipment necessary to establish an x-ray laboratory for student "hands-on" education. Such equipment includes a diagnostic x-ray machine, appropriate anatomical phantom(s), film and/or digital imaging sensors, a dark room, and chemical developers or computer processor. The costs for such equipment varies greatly, as some schools utilize donated equipment, equipment obtained through educational grants or equipment at existing medical facilities in order to provide students access to laboratory education. The Department estimates that it would cost a school approximately \$10,000 to purchase the equipment; however that cost varies with the type of equipment purchased, and whether it is new or pre-owned.

Board-approved schools will also incur administrative costs associated with supervising students as they participate in clinical education. Often, such education takes place in hospitals and medical offices outside of the school's facilities. Schools must assign students to clinical sites and track their progress through the clinical education curriculum. The Department estimates that diagnostic and radiation therapy schools spend on average, 150 to 200 hours annually supervising student clinical assignments. Using the above estimate of \$67.00 per hour equates to\$10,000 to \$13,400 in costs for these activities.

Additionally, agreements must be developed between the school and the clinical sites. Existing programs estimate that developing such an agreement can take 15 to 40 hours. Using the same estimate of \$67.00 per hour equates to \$1,005 to \$2,680. In some cases, the clinical sites charge the school a fee for the use of their facilities. In other cases, the clinical facilities and staff are made available to the school at no charge. The Department contacted several currently

approved diagnostic radiography schools that are assessed a fee by their clinical sites. Each reported a different cost. One school reported that it is assessed a fee of \$600.00 per student per year by the clinical site, which the school then passes on to the student. Another school reported that they paid a flat fee of \$2,500 per year. Therefore, the fee, if any, that a school is charged can vary widely.

For limited programs, the clinical education process is less formal. Schools spend on average 40 hours per enrolled class in supervisory activities and five hours in forming clinical site agreements. Using the estimate of \$49.00 per hour for limited programs, the costs for these activities are estimated at \$1,960 and \$245.00, respectively. Generally, clinical education for limited programs is performed in a doctor's office at no charge to the school or student

The economic impact to radiologist assistants (RA) and radiologist assistant schools from these proposed rules is minimal. An RA will incur the cost of maintaining his or her New Jersey radiologic technology license, which is proposed to be \$45.00 per year. Radiologist assistant schools that meet the nationally prescribed educational curriculum specified by the ASRT will be recognized by the Board. No further action is required to obtain Board recognition. Radiologist assistant schools will incur similar costs to assign and monitor the clinical education of their students as those described above for diagnostic and radiation therapy schools.

Environmental Impact

The proposed new rules will have a positive impact on the environment of the State by reducing the levels of man-made ionizing radiation released into the environment, thereby reducing New Jersey worker and public radiation exposure.

Federal Standards Statement

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. require State agencies that adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a Federal standards analysis. There are several Federal statutes that establish regulatory programs concerning radiation; however, the proposed rules do not contain any standards or requirements that exceed Federal law.

The Secretary of the United States Department of Health and Human Services (HHS) has promulgated regulations in 21 CFR Part 1000 et seq. that apply to devices that emit x-rays and other ionizing radiation, electrons, neutrons and other particulate radiation. Examples include television receivers, accelerators, x-ray machines, electron microscopes and neutron generators. These Federal regulations are applicable to manufacturers, distributors and dealers of these radiation-producing devices, and pertain primarily to record keeping and reporting requirements as well as to the importation of electronic devices (see 21 CFR Parts 1002, 1003, 1004 and 1005). These regulations are not applicable to the end-user of these devices, such as the medical, dental, hospital, governmental and industrial facilities that possess and use these devices.

In addition, 21 CFR Part 1020 establishes performance standards for ionizing radiation-producing equipment. These requirements apply to the manufacturer and assembler of these devices. Once the devices are sold and placed in use, the Federal government no longer regulates them. The use of the devices is, however, regulated in New Jersey where the applicable standards contained in this proposed rule are enforced at the medical, dental, hospital, state governmental and industrial facilities that possess these devices. The State standards governing the use of these radiation-producing devices are identical to the performance standards

established by the Secretary of HHS. Moreover, the State standards apply to different regulated entities than the Federal standards, and apply at a different time in the life cycle of the devices.

The State standards contained in these proposed rules prohibit manufacturers, assemblers, distributors, users or any other persons from training individuals who do not meet the qualifications for licensure in the use of x-ray equipment on humans. There are no equivalent Federal standards.

The proposed requirement that radiologic technologists be licensed in New Jersey is pursuant to State law at N.J.S.A. 26:2D-24 et seq. and these proposed rules at N.J.A.C. 7:28-19. There are no comparable Federal regulations on licensure.

Additionally, HHS promulgated regulations in 45 CFR Part 75. The Federal regulations require individuals who operate ionizing radiation-producing equipment at Federally owned or operated facilities to meet certain educational requirements. Neither these proposed rules nor any of the Department's rules governing ionizing radiation-producing equipment apply to Federal facilities.

The Commission and the Department have determined that the proposed new rules do not contain any standards or requirements that exceed standards or requirements imposed by Federal law. Accordingly, Executive Order No. 27(1994) and N.J.S.A. 52:14B-1 et seq. do not require further analysis.

Jobs Impact

The Commission and the Department anticipate that the proposed rules will have a positive impact on jobs in the State. A portion of the increased licensing fees contained in these proposed rules will be used to fund Bureau computer system enhancements to provide on-line

application capabilities for examination, licensing and license renewal. These enhancements will improve services to constituents by providing 24-hour access to license services. The Department has received an increasing number of inquiries from radiologic technologists and their employers regarding the ability to process applications on-line. Many technologists work during business hours, making the renewing of licenses difficult.

The Department has explored the possibility of providing on-line services in the past, but found the costs prohibitive. However, in recent years, the Department completed construction of a web-based business interface that now provides many business disciplines with the ability to conduct business with the Department on-line. In 2005 the Department determined that the Bureau's licensing processes could be handled utilizing existing Department web-based hardware, thereby significantly reducing the cost for providing on-line license renewal services. With this new information, the Department has begun to outline a plan to bring its examination and licensing activities on-line within a three-year period, starting with licensing renewal applications. The portion of increased revenues received from additional license and renewal fees will permit the completion of programming and system testing needed to bring this concept to fruition. Providing the ability to renew a radiologic technologist license on-line will potentially benefit over 20,000 licensed technologists in the first year alone. This will have a positive impact on jobs by providing the health care community with properly licensed technologists in timely manner.

Additionally, the Commission and the Department believe that the new rules will have a positive impact on jobs by recognizing a new healthcare profession called "radiologist assistant." There are currently students enrolled in a New Jersey RA school, who will be able to practice in New Jersey upon graduation when the proposed rules are adopted. Additionally, certified RAs

from out-of-State programs could, under the proposed rules, seek employment in New Jersey, thereby increasing the pool of qualified RA candidates for employment in New Jersey.

Agriculture Industry Impact

The Commission and the Department do not anticipate that the proposed rules will have an impact on the agriculture industry.

Regulatory Flexibility Analysis

The proposed rules will update New Jersey's radiation protection standards and educational standards for students who are enrolled in schools of radiologic technology. The proposed rules establish standards that will better protect patients, health care workers, the general public and the environment from unnecessary exposure to ionizing radiation resulting from radiological examinations.

It is estimated that 7,463 of the 7,550 facilities regulated by these proposed rules are considered "small businesses," as defined in the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq. The remaining 87 facilities are hospitals, which are not considered small businesses.

The only group of small businesses that will experience additional costs to comply with these regulations are the roughly 60 radiologic technology educational programs that will incur application and annual fees, as discussed in the Economic Impact above. The small businesses will not need to retain the services of consultants or other professionals in order to comply with the proposed rules. There are recordkeeping requirements, related to students and program curricula.

In developing the proposed rules, the Commission and the Department balanced the need to protect patients, healthcare workers and the general public from unnecessary exposure to ionizing radiation against the economic impact of the proposed new rules on small businesses.

The Commission and the Department have determined that to minimize the impact of the proposed rules on small businesses would create two different degrees of radiation protection standards and would endanger the health and safety of the citizens of the State of New Jersey.

Additionally, the Radiologic Technologist Act does not allow for different degrees of radiation protection standards, since it was enacted based upon on the finding that all citizens of New Jersey are entitled to maximum radiation protection. Therefore, the proposed rules do not exempt small businesses from the requirements.

Smart Growth Impact

Executive Order No. 4(2002) requires State agencies that adopt, amend or repeal State regulations to include in the rulemaking document a Smart Growth Impact statement that describes the impact of the proposed rules on the achievement of smart growth and implementation of the State Development and Redevelopment Plan (State Plan). The proposed rules do not relate to the State's land use and development policies in a way that would either encourage or discourage any development or redevelopment in this State contrary to the guiding principles of the State Plan. As a result, the Commission and the Department do not expect the proposed rules will have an impact on the State's achievement of smart growth or implementation of the State Plan.

Full text of the rules proposed for repeal appears in the New Jersey Administrative Code at N.J.A.C. 7:28-19.

Full text of the proposed new rules follows:

SUBCHAPTER 19. RADIOLOGIC TECHNOLOGY

7:28-19.1 Purpose, scope and applicability

(a) The purpose of this subchapter is to prohibit unnecessary ionizing radiation exposure and to prevent improper exposure of humans to ionizing radiation from radiologic technology, as set forth in the Radiologic Technologist Act.

(b) This subchapter:

- 1. Requires that all ionizing radiation-producing equipment be used in such a manner as to prevent unnecessary ionizing radiation exposure to humans;
- 2. Establishes educational and licensure requirements and delineates the scope of practice for persons engaged in the practice of radiologic technology;
- Establishes responsibilities of licensed practitioners as related to radiologic technology, as well as owners and registrants of ionizing radiation-producing equipment used on humans;
- 4. Establishes standards for the approval and operation of schools of radiologic technology; and

- 5. Defines the practice of radiologist assistant as it pertains to fluoroscopic procedures.
- (c) The following persons are not required to possess a radiologic technology license under this subchapter in order to perform the activities of a radiologic technologist, but are otherwise subject to the requirements of this subchapter unless specifically exempted:
 - 1. A licensed practitioner as defined in N.J.A.C. 7:28-19.2, provided that the licensed practitioner is practicing within the scope of his or her license;
 - 2. A dental hygienist registered by the New Jersey State Board of Dentistry, provided that the hygienist is practicing within the scope of his or her registration;
 - 3. A person enrolled in and attending a school or college of medicine, osteopathy, chiropody, podiatry, chiropractic, dentistry or dental hygiene, who is acting within the school's curriculum, when the person is performing tasks within the scope of practice of a radiologic technologist and is under the direct supervision of either a licensed practitioner or a licensed radiologic technologist; and
 - 4. A person who is:
 - i. Enrolled in and attending a Board-approved school of radiologic technology;
 - ii. Acting within the school's curriculum as approved in accordance with this subchapter and with the school's permission;
 - iii. Identified on the student list filed by the school with the Department;
 - iv. Acting in a clinical education center approved by the Board; and
 - v. Acting under the appropriate level of supervision as required by N.J.A.C. 7:28-19.12(b) and (c).

- (d) This subchapter does not apply to the use of ionizing radiation in veterinary medicine or in radiological examinations of deceased humans.
- (e) This subchapter does not establish educational and licensure requirements for nuclear medicine technologists, which are set forth at N.J.A.C. 7:28-24.
- (f) This subchapter does not apply to the use of ionizing radiation-producing equipment, identified at N.J.A.C. 7:28-17, 20 and 21.

7:28-19.2 Definitions

In addition to the terms defined at N.J.A.C. 7:28-1 and N.J.S.A. 26:2D-1 et seq., the following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

"Board" means the Radiologic Technology Board of Examiners created pursuant to N.J.S.A. 26:2D-24 et seq.

"Chest radiologic technologist (LRT(C))" means a person licensed in accordance with this subchapter whose scope of practice of radiologic technology is limited to the chest area for diagnostic purposes, as set forth at N.J.A.C. 7:28-19.4(a) and (d).

"Clinical education center" means a medical or dental facility (such as an office, hospital or imaging center) where students engage in the practice of radiologic technology for clinical education purposes.

"Commission" means the Commission on Radiation Protection as established by the Radiation Protection Act N.J.S.A 26:2D-1 et seq.

"Commissioner" means the Commissioner of the New Jersey Department of Environmental Protection.

"Crime" means any crime as defined by the New Jersey Code of Criminal Justice (N.J.S.A. 2C:1-4(a)) or the equivalent under Federal law or the laws of any state.

"Dental radiologic technologist (LRT(D))" means a person licensed in accordance with this subchapter whose scope of practice of radiologic technology is limited to dental radiography for diagnostic purposes, as set forth at N.J.A.C. 7:28-19.4(a) and (e).

"Department" means the New Jersey Department of Environmental Protection.

"Diagnostic radiologic technologist (LRT(R))" means a person licensed in accordance with this subchapter whose scope of practice of radiologic technology includes all types of radiographic procedures for diagnostic purposes, as set forth at N.J.A.C. 7:28-19.4(a) and (b).

"Direct supervision" means being present in the room with the student to observe and supervise the radiological examination.

"Engage" means to perform or assist in the performance of an activity.

"Indirect supervision" means being immediately available in the room or adjacent to the room where the student is performing the radiographic procedure.

"Ionizing radiation" means any form of radiation that has the capability of ionizing the medium through which it is passes.

"Ionizing radiation-producing equipment" means a machine or device that produces ionizing radiation.

"JRCERT" means Joint Review Committee in Education for Radiologic Technology.

"License" means a written authorization applied for in accordance with this subchapter and issued by the Board authorizing the licensee to engage in a specific scope of practice of radiologic technology as set forth at N.J.A.C. 7:28-19.4.

"Licensed practitioner" means a person licensed by the State of New Jersey to practice medicine, dentistry, podiatry, chiropody, osteopathy or chiropractic. Licensed practitioners do not include dental hygienists, nurses, nurse practitioners, physician assistants or radiologist assistants.

"Limited license" means a license with a scope of practice that is limited pursuant to N.J.A.C. 7:28-19.4.

"Non-invasive fluoroscopic procedure" means a fluoroscopic procedure included within the radiologist assistant scope of practice, as defined by the New Jersey State Board of Medical Examiners.

"Operate ionizing radiation-producing equipment" or "operating ionizing radiation-producing equipment" means the use or manipulation of ionizing radiation-producing equipment in any way that leads to or causes the application of radiation to humans or affects the amount or quality of radiation that is received by a human. The term "operate" or "operating" includes activating or terminating the radiation exposure, setting or adjusting technical factors, setting the mode of imaging, setting the camera rate, and setting or adjusting the size of the exposure field.

"Orthopedic radiologic technologist (LRT(O))" means a person licensed in accordance with this subchapter whose scope of practice of radiologic technology is limited to the spine and extremities for diagnostic purposes, as set forth at N.J.A.C. 7:28-19.4(a) and (f).

"Podiatric radiologic technologist (LRT(P))" means a person licensed in accordance with this subchapter whose scope of practice of radiologic technology is limited to the operation of x-ray machines on the foot, ankle and the distal third of the lower leg for diagnostic purposes, as set forth at N.J.A.C. 7:28-19.4(a) and (g).

"Position patients" or "positioning patients" means the placement and alignment of the x-ray tube, image receptor (to include cassette, film, digital detector, image intensifier) and the area of the patient to be exposed to ionizing radiation. For radiation therapy treatment procedures, "position patients" or "positioning patients" means the placement and alignment of the ionizing radiation source and the area of the patient to be exposed to ionizing radiation.

"Probationary approval" means a reduction in approval status awarded by the Board to an existing school of radiologic technology that is not in full compliance with the requirements of this subchapter and N.J.S.A. 26:2D-24 et seq.

"Provisional approval" means approval awarded by the Board to a new school of radiologic technology which, upon review of the application, is found to not be in full compliance with the requirements of this subchapter and N.J.S.A. 26:2D-24 et seq., but has submitted a plan for future compliance acceptable to the Board.

"Radiation Protection Act" means N.J.S.A. 26:2D-1 et seq., as supplemented or amended

"Radiation therapist (LRT(T))" means a person licensed in accordance with this subchapter whose scope of practice of radiologic technology is limited to the use of ionizing radiation-producing equipment for therapy simulation and therapeutic purposes, as set forth at N.J.A.C. 7:28-19.4(a) and (c).

"Radiation Technologist Act" means N.J.S.A. 26:2D-24 et seq., as supplemented or amended.

"Radiologic technologist" means a person who is licensed pursuant to this subchapter, which shall include chest radiologic technologist (LRT(C)), dental radiologic technologist (LRT(D)), diagnostic radiologic technologist (LRT(R)), radiation therapist (LRT(T)), podiatric radiologic technologist (LRT(P)), orthopedic radiologic technologist (LRT(O)), and urologic radiologic technologist (LRT(U)).

"Radiologic technology" means the application of ionizing radiation to humans for diagnostic, therapy simulation, or therapeutic purposes.

"Radiological examination" means a procedure that uses ionizing radiation on humans for diagnostic, therapy simulation, or therapeutic purposes.

"Radiologist" means a physician who is licensed by the New Jersey Board of Medical Examiners and is either board-certified by the American Board of Radiology or the American Osteopathic Board of Radiology or has satisfactorily completed a residency program in radiology approved by the Accreditation Council for Graduate Medical Education.

"Radiologist assistant" means a licensed diagnostic radiologic technologist who has completed additional education in a radiologist assistant program and attained national

certification as a radiologist assistant and who may perform non-invasive fluoroscopic procedures while under the supervision of a radiologist, as provided at N.J.A.C. 7:28-19.16(a).

"Student" means any person who is currently enrolled in and attending a school of radiologic technology approved by the Board.

"Temporary license" means a license issued for a limited period of time in accordance with N.J.A.C. 7:29-19.8.

"Unnecessary ionizing radiation" means ionizing radiation that does not confer a diagnostic or therapeutic benefit or is excessive to achieve the medical or dental purpose.

"Urologic radiologic technologist (LRT(U))" means a person licensed in accordance with this subchapter whose scope of practice of radiologic technology is limited to the abdomen and pelvic area for urologic diagnostic purposes, as set forth at N.J.A.C. 7:28-19.4(a) and (h).

7:28-19.3 General provisions

- (a) Except as provided at N.J.A.C. 7:28-19.1(c) through (f):
 - 1. No person shall engage in any activity within a scope of practice of radiologic technology as defined in N.J.A.C. 7:28-19.4 unless that person possesses a valid license authorizing the person to engage in that scope of radiologic technology.
 - 2. No person shall operate ionizing radiation-producing equipment or position patients for mammographic procedures unless that person possesses a valid

license in diagnostic radiologic technology and is in compliance with the radiologic technologist personnel requirements of the Mammography Quality Standards Act (42 U.S.C. 263b) and 21 CFR Part 900, as supplemented or amended, and incorporated herein by reference.

- (b) No person shall operate ionizing radiation-producing equipment or cause, allow or permit the use of such equipment in such a manner as to expose humans to ionizing radiation, except as provided in this subchapter.
- (c) No owner, licensed practitioner, or registrant of ionizing radiation-producing equipment shall cause, allow, or permit any person to engage in any activity within a scope of practice of radiologic technology as defined in N.J.A.C. 7:28-19.4, unless that person possesses a valid license authorizing the person to engage in that scope of radiologic technology.
- (d) No person shall cause, allow, or permit a radiologic technologist to be in the primary beam, unless it is deemed essential for the specific examination by the licensed practitioner and the radiologic technologist is wearing protective garments over all body areas in the primary beam as required by N.J.A.C. 7:28-15.9.
- (e) No owner, licensed practitioner, or registrant of ionizing radiation-producing equipment shall cause, allow, or permit any person to perform mammographic procedures unless that person complies with the requirements of this subchapter.

- (f) No school of radiologic technology subject to this subchapter shall enroll students unless the school is approved by the Board.
- (g) No school subject to this subchapter shall hold itself out to be an approved school of radiologic technology or claim in any way that completion of the school's curriculum will enable students to be eligible for New Jersey examination and/or New Jersey licensure, unless the school is approved by the Board.
- (h) No person shall use or permit the use of ionizing radiation-producing equipment in such a manner as to expose humans to unnecessary ionizing radiation.
- (i) A radiologic technologist shall immediately display his or her radiologic technology license or a true copy thereof, upon request of the Department, employer or any patient.
- (j) A radiologic technologist shall notify the Department of any conviction of a crime under Federal law or the law of any state within 30 calendar days of such conviction.
- (k) Any conviction of a crime committed while not engaged in the practice of radiologic technology does not, in itself, constitute a lack of good moral character for the purposes of N.J.A.C. 7:28-19.6(a)2, 19.9(e) and 19.11(a)1.

- (*l*) No person or organization shall provide training in the operation of ionizing radiation-producing equipment or patient positioning to persons other than those authorized to use such equipment as specified in this subchapter.
- (m) No person licensed pursuant to this subchapter shall use ionizing radiation-producing equipment on humans for any purpose other than for medical diagnosis, dental diagnosis, therapy simulation, therapy or monitoring of dental treatment. All such use must be at the direction of a licensed practitioner who is practicing within the scope of his or her license.
- (n) No radiologic technologist licensed pursuant to this subchapter shall prescribe a radiological examination.
- (o) No radiologic technologist licensed pursuant to this subchapter shall render an interpretation of a radiological examination.
- (p) The license of a radiologic technologist may be suspended for a fixed period, or may be revoked, or the technologist may be censured, reprimanded or otherwise disciplined in accordance with the provisions and procedures set forth in the Radiologic Technologist Act, if after due process, the Board finds that the technologist has committed an act of unethical conduct, as defined in N.J.A.C. 7:28-19.5, or has violated any provision of this chapter, the Radiation Protection Act or the Radiologic Technologist Act. A radiologic technologist may request a hearing in accordance with N.J.A.C. 7:28-19.17(b) if aggrieved by the Board's actions.

7:28-19.4 Scopes of practice

- (a) Any person who possesses a valid license in radiologic technology shall exercise proper principles of radiation protection with regard to radiological examinations.
- (b) Any person who possesses a valid license to practice diagnostic radiologic technology issued in accordance with this subchapter may engage in the following activities, which constitute the scope of practice of diagnostic radiologic technology:
 - 1. Operate ionizing radiation-producing equipment for radiographic procedures;
 - 2. Measure patients for radiographic procedures;
 - 3. Position patients for radiographic procedures;
 - 4. Set technique factors for radiographic procedures;
 - 5. Set the source-to-image receptor distance for radiographic procedures;
- 6. Assist in fluoroscopic procedures using ionizing radiation-producing equipment provided that a licensed physician is physically in the room and directing the procedure; and

- 7. Administer contrast media and pharmaceuticals provided that the material and its administration comply with New Jersey State Board of Medical Examiners (BME) rules, N.J.A.C. 13:35-6.20.
- (c) Any person who possesses a valid license to practice radiation therapy technology issued in accordance with this subchapter may engage in the following activities, which constitute the scope of practice of radiation therapy technology:
- 1. Operate ionizing radiation-producing equipment for therapy simulation and therapeutic procedures only;
 - 2. Position patients and equipment for therapy simulation and treatment procedures;
 - 3. Deliver the treatment dose prescribed by a licensed physician;
 - 4. Record and certify the parameters of each treatment delivered in the patient record;
 - 5. Select and position any required immobilization devices and beam modification devices;
- 6. Perform fluoroscopic procedures for therapy simulation while under the direction of a licensed physician who is on-site during the procedure; and

- 7. Assist in treatment planning procedures while under the supervision of a licensed physician or therapy physicist or medical dosimetrist.
- (d) Any person who possesses a valid license to practice chest radiologic technology issued in accordance with this subchapter may engage in the following activities, which constitute the scope of practice of chest radiologic technology; however, the scope of practice does not include radiographic procedures of the ribs or sternum or any type of fluoroscopy, tomography or computed tomography procedure:
- 1. Operate fixed (not portable) ionizing radiation-producing equipment for chest radiographic procedures only;
 - 2. Measure patients for chest radiographic procedures only;
- 3. Position patients for posterior-anterior, anterior-posterior, oblique, lateral, decubitus and apical lordotic views for chest radiographic procedures only;
 - 4. Set the technique factors for chest radiographic procedures only; and
- 5. Set the source-to-image receptor distance for chest radiographic procedures only.

- (e) Any person who possesses a valid license to practice dental radiologic technology issued in accordance with this subchapter may engage in the following activities, which constitute the scope of practice of dental radiologic technology; however, the scope of practice does not include any type of fluoroscopy, tomography or computed tomography procedure:
- Operate ionizing radiation-producing equipment for dental radiographic procedures only;
 - 2. Position patients for intra-oral and extra-oral dental radiographic procedures only;
 - 3. Set the correct technique factors for dental radiographic procedures only; and
 - 4. Set the source-to-image receptor distance for dental radiographic procedures only.
- (f) Any person who possesses a valid license to practice orthopedic radiologic technology issued in accordance with this subchapter may engage in the following activities, which constitute the scope of practice of orthopedic radiologic technology; however, the scope of practice does not include radiographic procedures of the sterno-claviclar joints, sternum and ribs or any type of fluoroscopy, tomography, computed tomography or bone densitometry procedures:
- 1. Operate fixed (not portable) ionizing radiation-producing equipment for orthopedic radiographic procedures only;

- 2. Measure patients for orthopedic radiographic procedures only;
- 3. Position patients for radiographic procedures limited to the spine and extremities;
- 4. Set the technique factors for orthopedic radiographic procedures only; and
- 5. Set the source-to-image receptor distance for orthopedic radiographic procedures only.
- (g) Any person who possesses a valid license to practice podiatric radiologic technology issued in accordance with this subchapter may engage in the following activities, which constitute the scope of practice of podiatric radiologic technology; however, the scope of practice does not include bone densitometry or procedures involving the injection of contrast media or fluoroscopy.:
- 1. Operate ionizing radiation-producing equipment for podiatric radiographic procedures only;
- 2. Position patients for radiographic procedures limited to the foot, ankle and distal third of the lower leg (tibia/fibula);
 - 3. Set technique factors for podiatric radiographic procedures only; and
 - 4. Set the source-to-image receptor distance for podiatric radiographic procedures only.

- (h) Any person who possesses a valid license to practice urologic radiologic technology issued in accordance with this subchapter may engage in the following activities, which constitute the scope of practice of urologic radiologic technology; however, the scope of practice does not include fluoroscopy, computed tomography or bone densitometry procedures:
- 1. Operate ionizing radiation-producing equipment for urologic radiographic procedures only;
- 2. Position patients for radiographic procedures limited to the abdomen and pelvic area for urologic radiographic procedures only;
 - 3. Measure patients for urologic radiographic procedures only;
 - 4. Set technique factors for urologic radiographic procedures only; and
 - 5. Set the source to image receptor distance for urologic radiographic procedures only.

7:28-19.5 Unethical conduct

- (a) The Board may, in its discretion, consider the acts listed below, among others, as acts of unethical conduct by a person subject to this subchapter. Such acts are subject to sanction pursuant to N.J.S.A. 26:2D-34(a) and 36, as supplemented or amended:
- 1. Conviction of any crime that reasonably relates to any field of radiologic technology.

 For the purpose of this section, a plea of guilty, non vult, no contest, or other such disposition of alleged criminal activity shall be deemed a conviction;
- 2. Revocation or suspension of a certification, registration, or license to practice radiologic technology or censure or reprimand by any other state or certifying agency for reasons consistent with this subchapter;
 - 3. Dishonesty, fraud, deception, misrepresentation, or falsification in:
 - i. Any field relating to radiologic technology or the education of radiologic technology students or in documenting compliance with the Radiation Protection Act, the Radiologic Technologist Act or this chapter as supplemented or amended;
 - ii. Obtaining a radiologic technology license, including taking the examination and completing the required education and training;
 - iii. Statements on any application for examination or license;

- iv. Statements or documentation regarding the status of any national certification relating to the field of radiologic technology;
 - v. Statements made to a representative of the Department or Board; or
- vi. Any records relating to the practice of radiologic technology or to the education of radiologic technology students;
- 4. Altering any license or examination results;
- 5. Practicing radiologic technology or reporting to work as a radiologic technologist while under the influence of alcohol or a Controlled Dangerous Substance as defined in the New Jersey Code of Criminal Justice;
- 6. Acting in a negligent or incompetent manner relating to radiologic technology or the education of radiologic technology students;
- 7. Maliciously destroying or stealing property or records relating to the practice of radiologic technology or to the education of radiologic technology students;
- 8. Failing to exercise due regard for safety, life or health while engaged in the practice of radiologic technology or the education of radiologic technology students;

- 9. Violating any term limitation, condition or restriction that the Board has placed on his or her radiologic technology license;
- 10. Failing to comply with any State or Federal law or regulation regarding the confidentiality of a patient's medical or dental information;
 - 11. Impersonating a licensed radiologic technologist;
- 12. Discriminating in the practice of radiologic technology or in the education of radiologic technology students as defined in Section 3 of New Jersey Law Against Discrimination in N.J.S.A. 10:5-3, as supplemented or amended; or
- 13. Engaging in the practice of radiologic technology or in the education of students in an unprofessional or unethical manner as determined by the Board.
- (b) There is a rebuttable presumption that a person who has been determined by the Board to have committed an act of unethical conduct or has been convicted of a crime involving moral turpitude does not meet the standard of good moral character as required for purposes of N.J.A.C. 7:28-19.6(a)2, 19.9(e) and 19.11(a)1.

7:28-19.6 Requirements of applicants for the licensing examination

- (a) Subject to (c) below, the Board shall admit to a licensing examination any applicant who has paid to the Department a fee as specified in N.J.A.C. 7:28-19.10(a)1 and has submitted satisfactory evidence to the Board, verified by oath or affirmation, that the applicant:
 - 1. At the time of application is at least 18 years of age;
 - 2. Is of good moral character;
 - 3. Has successfully completed a four year course of study in a secondary school (high school) approved or recognized by the State Board of Education, or passed an approved equivalency test; and
 - 4. Has complied with the applicable requirements of (b) below.
- (b) In addition to the requirements of (a) above, any person seeking admission to a licensing examination in a specific scope of practice of radiologic technology (see N.J.A.C. 7:28-19.4) shall comply with the following:
 - 1. Each applicant for examination in diagnostic radiologic technology shall have satisfactorily completed a 24-month course of study in diagnostic radiologic technology approved by the Board or its equivalent as determined by the Board.

- 2. Each applicant for examination in radiation therapy technology shall have satisfactorily completed a 24-month course of study in radiation therapy technology approved by the Board or its equivalent as determined by the Board. A 12-month radiation therapy technology course of study that requires applicants to have satisfactorily completed a 24-month course of study in diagnostic radiologic technology or its equivalent as determined by the Board is the equivalent of a 24-month course of study in radiation therapy technology.
- 3. Each applicant for examination in chest radiologic technology shall have satisfactorily completed the curriculum for chest radiography as approved by the Board or its equivalent as determined by the Board.
- 4. Each applicant for examination in dental radiologic technology shall have satisfactorily completed the curriculum for dental radiography as approved by the Board or its equivalent as determined by the Board.
- 5. Each applicant for examination in podiatric radiologic technology shall have satisfactorily completed the curriculum for podiatric radiography as approved by the Board or its equivalent as determined by the Board.
- 6. Each applicant for examination in orthopedic radiologic technology shall have satisfactorily completed the curriculum for orthopedic radiography as approved by the Board or its equivalent as determined by the Board.

- 7. Each applicant for examination in urologic radiologic technology shall have satisfactorily completed the curriculum for urologic radiography as approved by the Board or its equivalent as determined by the Board.
- (c) The Board may determine that an applicant is ineligible for examination if the applicant does not fulfill the requirements of (a) and (b) or has violated any provision of this chapter, the Radiation Protection Act or the Radiologic Technologist Act. The applicant may request a hearing in accordance with N.J.A.C. 7:28-19.17(a), if aggrieved by the Board's actions.
- (d) An applicant who fails to pass the examination may reapply for the examination provided the applicant meets the requirements of this section.
- (e) Any person who has failed a particular examination three times shall not be permitted to take that examination a fourth time until that person has submitted proof of completion of a remedial course that includes a full review of course material in areas of low performance as identified by the examination.
- (f) After the fourth failure, the person may not retake a particular examination until that person has submitted proof that he or she has re-enrolled and successfully completed a remedial course of study in a Board-approved school of radiologic technology, or an equivalent school as determined by the Board, in an appropriate time frame determined by the school.

7:28-19.7 Requirements of applicants for licensure

- (a) Subject to (d) below, the Board shall issue a license to any applicant who has paid to the Department a fee as specified in N.J.A.C. 7:28-19.10(a)2 and has submitted satisfactory evidence to the Board, verified by oath or affirmation, that the applicant:
 - 1. Has met the requirements in N.J.A.C. 7:28-19.6(a) and (b), and
 - 2. Has passed the Board's examination in the license category for which the applicant has applied.
- (b) In lieu of its own examination required by (a)2 above, the Board may accept a valid active certificate issued by the American Registry of Radiologic Technologists (ARRT) or a valid active certificate or license as a radiologic technologist issued by another state, provided the Board determines that the ARRT's or the other state's standards are equivalent to those established by the Board.
- (c) In lieu of its own examination for a dental radiologic technologist LRT(D), required by (a)2 above, the Board may accept:
 - 1. A valid registration as a dental assistant issued by the New Jersey Board of Dentistry, provided the applicant passed the certification examination including the "Radiation Health and Safety" examination given by the Dental Assisting National Board and any education

requirements as may be prescribed by the New Jersey Board of Dentistry, and provided the Board determines that the above standards are equivalent to those established by the Board; or

- 2. A valid active certificate issued by the Dental Assisting National Board demonstrating that the applicant has successfully passed the "Radiation Health and Safety" examination, provided the Board determines that the above standards are equivalent to those established by the Board.
- (d) The Board may determine that an applicant is ineligible for licensure if the applicant does not fulfill the requirements of (a), (b) and (c) or has violated any provision of this chapter, the Radiation Protection Act or the Radiologic Technologist Act. The applicant may request a hearing in accordance with N.J.A.C. 7:28-19.17(a), if aggrieved by the Board's actions.

7:28-19.8 Temporary, conditional and restricted licenses

(a) The Board may, at its discretion, issue a temporary license to any person who has submitted a license application for a license in diagnostic radiologic technology or radiation therapy technology when the issuance of a temporary license may be justified by reason of special circumstances. A temporary license shall be issued only if the Board finds that its issuance will not violate the purposes of the Radiation Protection Act or the Radiologic Technologist Act, or tend to endanger the public health and safety. A temporary license shall expire 90 calendar days after the date the applicant has successfully completed the course of

study in radiologic technology. Only one temporary license in a specific licensure category shall be issued to any person.

- (b) The Board, at its discretion, may place conditions or restrictions on any license including, but not limited to, a condition or restriction limiting the scope of practice of a licensed radiologic technologist.
- (c) No person who has been issued a conditional or restricted license shall practice outside of the conditions or restrictions as placed on the license by the Board.

7:28-19.9 License expiration, reissuance and renewal

- (a) Except as provided at N.J.A.C. 7:28-19.1(c), no person or radiologic technologist shall engage in any scope of practice of radiologic technology without a valid and effective radiologic technology license issued under this subchapter authorizing the licensee to engage in that scope of practice.
- (b) A license issued in accordance with this subchapter is effective as of the date of issuance, or January 1st of an odd numbered year, whichever is later, and expires on the immediately following December 31st of an even numbered year. No license is valid longer than two years. It is the Board's practice, but not its obligation, to mail license renewal applications to all licensees at least 60 calendar days prior to the license expiration date.

- (c) A radiologic technologist shall inform the Department of any change in his or her name and/or address no later than 30 calendar days after the change.
- (d) To maintain a valid license, a radiologic technologist shall renew his or her license any time prior to its expiration by submitting a renewal application for a radiologic technology license and the required renewal fee specified in N.J.A.C. 7:28-19.10(a)3.
- (e) The Board may deny an application for renewal if the Board has determined that the radiologic technologist is not of good moral character or has violated any provision of this subchapter, the Radiation Protection Act or the Radiologic Technologist Act. The applicant may request a hearing as provided by N.J.A.C. 7:28-19.17(b) if aggrieved by the Board's action.
- (f) A radiologic technologist who possesses an expired license may apply to have the license reissued, provided that the license has not been expired for five years or more. An individual who wishes to have a license reissued that has been expired less than five years shall submit an application for reissuance and the fee specified in N.J.A.C. 7:28-19.10(a)3. If such individual has not engaged in the practice of radiologic technology at any time in New Jersey during the period the license was expired, the individual is required only to pay the reissuance fee for the current license period. If such individual has engaged in the practice of radiologic technology at any time in New Jersey during the period the license was expired, in addition to the reissuance fee for the current license period, the individual shall pay the reissuance fee for each previous renewal period, in addition to other sanctions that may be imposed under the Radiation

Protection Act or the Radiologic Technologist Act for practicing radiologic technology without a license.

(g) A radiologic technologist who possesses a license that has been expired for five or more years may not have that license renewed, but may apply for a license in accordance with N.J.A.C. 7:28-19.7.

7:28-19.10 Fees

(a) Any person who submits an application for examination, license or license reissuance or renewal to the Department shall include as an integral part of said application a service fee as follows:

1. Examination Fee: \$160.00

2. License Application Fee: \$60.00

3. License Reissuance or Renewal Fee: \$90.00

4. License Reprint Fee \$20.00

- (b) Any new school that submits an application for Board approval in any of the categories of radiologic technology shall include, as an integral part of said application, a service fee as follows:
 - 1. Diagnostic Radiography School Fee \$2,500

2.	Radiation Therapy Technology School Fee	\$2,500

3. Dental Radiography School Fee \$1,650

4. Limited Radiography School Fee \$1,650

(c) A Board approved school of radiologic technology shall submit the appropriate annual fee as follows:

1	Diagnostia Padiagraphy Cahool Ego	\$1,000
1.	Diagnostic Radiography School Fee	\$1,000

2. Radiation Therapy Technology School Fee \$1,000

3. Dental Radiography School Fee \$400.00

4. Limited Radiography School Fee \$200.00

(d) All fees shall be in the form of a check or money order or any other manner acceptable to the Department made payable to the Treasurer, State of New Jersey. Fees submitted to the Department are not refundable.

(e) All license renewal or reissuance applications and the associated fees specified in (a)3 above, and the approved school annual fees as specified in (c) above, shall be submitted to:

Department of Treasury

Division of Revenue

PO Box 417

Trenton, New Jersey 08646-0417

(f) All other applications and associated fees specified in (a)1, 2 and 4 and (b) above shall be submitted to:

Department of Environmental Protection

Bureau of Radiological Health

25 Arctic Parkway

PO Box 415

Trenton, New Jersey 08625-0415

7:28-19.11 Minimum requirements for admission to a school of radiologic technology

- (a) A school of radiologic technology approved by the Board pursuant to this subchapter shall only enroll a candidate who at the time of admission meets or exceeds the following minimum requirements:
 - 1. Is of good moral character;
 - 2. Has successfully completed a four-year course of study in a secondary school (high school) approved by the State Board of Education or passed an approved equivalency test; and
 - 3. Meets the admission criteria of that school of radiologic technology.

- (b) The school of radiologic technology shall ensure that each candidate for admission submits a formal application.
- (c) Each school of radiologic technology shall keep on file for at least two years after a student graduates, withdraws or is dismissed the student's application and any document used to determine eligibility for admission to the school.

7:28-19.12 Requirements for students engaging in the scope of practice of radiologic technology

- (a) Only students who meet the requirements of N.J.A.C. 7:28-19.1(c)4 are permitted to engage in the practice of radiologic technology.
- (b) Any licensed practitioner, registered dental hygienist, or licensed radiologic technologist, who is acting within the scope of that license or registration, shall provide direct or indirect supervision to student technologists that includes:
 - 1. The evaluation of the request for the radiological examination in relation to the student's knowledge and competency;
 - 2. The evaluation of the condition of the patient in relation to the student's knowledge and competency; and

- 3. The evaluation and approval of all resultant radiological images and/or data.
- (c) The school of radiologic technology and the clinical education center shall:
- 1. For students in schools of diagnostic radiologic technology, ensure that students are supervised in accordance with the following:
- i. Prior to a Board-approved faculty member determining that a student is clinically competent in a given radiographic procedure, the student shall perform that procedure only under the direct supervision of a licensed diagnostic radiologic technologist.
- ii. After clinical competency in a radiographic procedure has been determined by a Board-approved faculty member, the student may perform that procedure under indirect supervision of a licensed diagnostic radiologic technologist.
- iii. Any exposure that needs to be repeated shall be repeated under the direct supervision of a licensed diagnostic radiologic technologist.
- 2. For students in schools of radiation therapy technology, ensure that all therapy simulation and therapeutic procedures are performed under direct supervision of a licensed radiation therapist.

- 3. For students in schools of chest, orthopedic, podiatric, and urologic radiologic technology, ensure that all radiographic procedures are performed under direct supervision of a licensed practitioner, a licensed diagnostic radiologic technologist, or a person licensed in that specific category of radiologic technology.
- 4. For students in schools of dental radiologic technology, ensure that all procedures are performed under direct supervision of a licensed dentist, registered dental hygienist, a licensed diagnostic radiologic technologist, or a licensed dental radiologic technologist.
 - 5. Ensure that students in schools of diagnostic radiologic technology do not move or position the image intensifier or initiate x-ray exposure during fluoroscopic procedures.
 - 6. Ensure that students are not assigned to clinical education rotations in such a manner as to substitute for radiologic technologists.
- 7. Ensure that during clinical education activities the number of students assigned to a clinical education center and on site at any time does not exceed the Board-approved student capacity for that clinical education center.
- 8. Ensure that during clinical education activities students wear visible identification name badges that identify them as student radiologic technologists.

- 9. Ensure that during clinical education activities each student wears a personnel radiation-monitoring device.
- 10. Ensure that all activities involving clinical education are performed in accordance with the school's published policies and procedures, and the agreement between the school of radiologic technology and the clinical education center.
 - 11. Ensure that students are not:
 - i. In the primary beam;
- ii. Permitted to remain in the x-ray room outside the control booth during an x-ray exposure unless the student is provided with a protective apron or shield that is at least 0.5 mm of lead equivalent; or
- iii. Permitted to engage in any other practices likely to result in unnecessary exposure to ionizing radiation.

7:28-19.13 Requirements for schools of radiologic technology

(a) A school in diagnostic radiologic technology shall provide a course of study that is at least 24 months in length or its equivalent as determined by the Board. The educational curriculum shall include ethics and law in radiologic technology; medical terminology; patient

care management; human anatomy and physiology; radiographic procedures; imaging and processing; imaging equipment; image analysis; radiation production and characteristics; radiation physics; radiation protection; radiation biology; radiologic pathology; computers in radiologic technology; pharmacology and drug administration; quality assurance; and shall provide for competency-based clinical education in accordance with the Board's accreditation standards. The curriculum shall be a JRCERT recognized curriculum, provided that it does not conflict with this subchapter.

- (b) A school of radiation therapy technology shall provide a course of study that is at least 24 months in length or its equivalent as determined by the Board. This course of study can be 12 months in length if the applicant has successfully completed a Board-approved or equivalent diagnostic radiologic technology program. The educational curriculum shall include ethics and law in radiation therapy; medical terminology; patient care management in radiation therapy; radiation protection; pathology; radiation physics; radiation therapy physics; medical imaging and processing; sectional anatomy; operational issues in radiation therapy; treatment planning, beam modification devices and dosimetry; simulation and therapy procedures and technique; quality management; and shall provide for competency-based clinical education. The curriculum shall be a JRCERT recognized curriculum, provided that it does not conflict with this subchapter.
- (c) A school of dental radiologic technology shall follow the Board's approved curriculum in dental radiologic technology, which is available from the Department by written request to the address listed at N.J.A.C. 7:28-19.10(f). In the alternative, the curriculum shall be the American

Dental Association's or any nationally recognized published curriculum, provided that it does not conflict with this subchapter or the Board's approved curriculum.

- (d) A school of podiatric radiologic technology shall follow the Board's approved curriculum in podiatric radiologic technology, which is available from the Department by written request to the address listed at N.J.A.C. 7:28-19.10(f). In the alternative, the curriculum shall be the American Podiatric Medical Assistants Association's or any nationally recognized published curriculum, provided that it does not conflict with this subchapter or the Board's approved curriculum.
- (e) A school of chest, orthopedic, or urologic radiologic technology shall follow the Board's approved curriculum in that category of radiologic technology, which is available from the Department by written request to the address listed at N.J.A.C. 7:28-19.10(f). In the alternative, the curriculum shall be any nationally recognized published curriculum, provided that it does not conflict with this subchapter or the Board's approved curriculum.
 - (f) Each school of radiologic technology shall:
 - 1. Comply with N.J.A.C. 7:28-19.11 and 12 and the Board's accreditation standards, which are available from the Department's Bureau of Radiological Health.
 - 2. Prepare and maintain a current and accurate written course syllabus for each content area delineated in the program's Board approved curriculum. These documents shall include, but are

not limited to, lesson plans, learning objectives, classroom schedules, and student evaluation instruments. These documents shall be on file at the school and shall be produced for review by the Department or its representative during an inspection, and shall be submitted to the Department upon request.

- 3. Employ and/or appoint only Board-approved program directors, clinical coordinators, clinical instructors and clinical supervisors.
- 4. Issue to each candidate prior to admission a current and dated course catalog, bulletin, or other written statement, which shall include, but not be limited to a description of the curriculum as a whole, the requirements for admission, requirements for graduation, and information concerning amounts and terms of payment of any tuition and fees or expenses to be incurred. The information contained in these documents shall accurately reflect the program offered.
- 5. Issue to each enrolled student a current and dated catalog, handbook, or policy manual that includes all program and school policies, which shall include, but not be limited to policies regarding conduct, dismissal, grading, and pregnancy as it relates to radiation protection. All policies and procedures shall accurately reflect the program offered.
 - 6. Enroll only students who meet the school's requirements for admission.

- 7. Report in writing to the Department, within 30 calendar days of any student's matriculation date, the name and address of each new student enrolled and, within 30 calendar days of the date the student completes the course of study (as set forth on the certificate issued in accordance with (f)7 below), the name and address of each student graduated.
- 8. Have and comply with an educational plan for didactic and laboratory instruction and clinical assignments, with objectives relating to the specific practice of radiologic technology.
- 9. Maintain current student records that accurately reflect the student's didactic and clinical progress.
 - 10. Permanently maintain an official course transcript for each graduate.
- 11. Maintain all academic and clinical records for at least 6 months for each student who has left, withdrawn, or was dismissed from the program.
- 12. Ensure that it has adequate administrative, clerical, clinical, faculty, financial and physical resources to support all enrolled students.
- 13. Ensure that each student is provided with a personnel radiation-monitoring device during his or her period of attendance. Student exposure to radiation shall not exceed any of the occupational limits prescribed in N.J.A.C. 7:28-6.1. Within 30 calendar days of the school's receipt of any radiation dosimetry report, the school shall inform all students of their most recent

exposure readings. In the event that a student receives an exposure of 50 mrem (0.5 mSv) or greater on any monthly radiation dosimetry report, or 100 mrem (1.0 mSv) or greater on any bimonthly radiation dosimetry report, or 150 mrem (1.5 mSv) or greater on any quarterly report, or an exposure that exceeds any of the occupational limits in N.J.A.C. 7:28-6.1, the school shall begin an investigation to find the cause and prevent recurrence of the exposure. The investigation report shall be completed within 30 calendar days of the school's receipt of notification of the exposure. This investigation report shall include any action to be taken to reduce unnecessary radiation exposure. The investigation report shall be given to the student and shall be maintained in the student's file. If any of the occupational limits in N.J.A.C. 7:28-6.1 is exceeded, a copy of the investigation report must be submitted to the Department. Within 90 calendar days of departure from the school, the school shall provide each student with a complete record of his or her radiation exposure history.

- 14. For each student who has declared her pregnancy in writing, with an approximate date of conception, a school shall:
 - Provide instruction regarding radiation exposure and risks as they relate to the embryo-fetus and pregnancy;
 - ii. Provide program enrollment options to accommodate pregnancy while allowing the student to complete the curriculum. If the student elects to continue with her education within the radiography program, the school shall ensure that a personnel radiation-monitoring device is worn at the waist level during the term of her pregnancy;

- iii. If the student has the potential of engaging in fluoroscopic or portable radiographic procedures, provide to the student with and require her to wear two personnel radiation-monitoring devices. One device shall be worn at the neck level outside the protective apron and the other under the protective apron at the waist level;
- Limit the student's exposure, as registered on the personnel radiationmonitoring devices, in order that the exposure of the embryo-fetus does
 not exceed the most recent recommended limit published by the National
 Council on Radiation Protection and Measurements (NCRP). As of (the
 operative date of these rules) the recommended limit is contained in
 NCRP Report #116 entitled Limitation of Exposure to Ionizing Radiation,
 published in 1993. The publication can be obtained from NCRP by
 contacting them at 7910 Woodmont Ave., Suite 400, Bethesda, Md. 20814
 or at: www.ncrponline.org. This report recommends a monthly equivalent
 dose limit of 50 mrem (0.5 mSv) to the embryo-fetus (excluding medical
 and natural background radiation) once the pregnancy is known. The
 Deep Dose Equivalent value reported for the device worn at the student's
 waist will be considered the initial estimated dose received by the embryofetus:
- v. Within seven calendar days of the school's receipt of a radiation dosimetry report, the school shall inform the pregnant student of her most recent exposure readings. If the Deep Dose Equivalent in any month is 50 mrem (0.5 mSv) or higher, the school and student shall consult with a medical

physicist or health physicist, who is certified by the American Board of Radiology, American Board of Medical Physics, American Board of Health Physics or the equivalent as determined by the Commission; and

- vi. Submit to the Department, with a copy to the student, a report of the consultation provided in (f)14v, if required, including any recommendation(s), assignment modifications and the student's exposure history, within 21 calendar days of the school's receipt of the radiation dosimetry report.
- 15. Issue to each student who satisfactorily completes a course of study a dated certificate that specifies the particular course of study completed.
- 16. Inform the Department within 15 calendar days of any change that could adversely affect the school's ability to fulfill its ability to provide students with appropriate didactic and laboratory instruction and clinical assignments, or has altered how the school operates since its last review and approval by the Board. Such changes include but are not limited to a change in status or loss of any official or faculty member, change of curriculum, loss of a clinical affiliate, the sequencing of courses, length of the program or sponsorship of the program.
- 17. If the school's curriculum is in diagnostic radiologic technology or radiation therapy technology, have no more than two consecutive years in which the pass rate for students taking the American Registry of Radiologic Technologists (ARRT) examination for the first time is below 75 percent.

- 18. If the school's curriculum is in chest, dental, orthopedic, podiatric or urologic radiologic technology, have no more than two consecutive years in which both the first-time mean score and pass rate for the Board's examination are below 75 percent.
- 19. Ensure that a student's total academic and clinical instruction does not exceed 40 hours per week.
- (g) In addition to (f) above, schools of diagnostic radiologic technology and radiation therapy technology shall comply with the JRCERT Standards for an Accredited Educational Program in Radiologic Sciences (JRCERT Standards). In case of conflict with this subchapter or the Board's accreditation standards, this subchapter and the Board's accreditation standards shall supersede the JRCERT Standards. Copies of the JRCERT Standards and the Board's accreditation standards may be obtained by contacting the Department's Bureau of Radiological Health at PO Box 415, Trenton, NJ 08625-0415 or the JRCERT at 20 N. Wacker Dr., Suite 2850, Chicago, II, 60606 or www.jrcert.org.

7:28-19.14 School of radiologic technology: process for approval; provisional approval; probationary approval; termination of approval and other general provisions

(a) In order to be Board-approved, a school of radiologic technology shall submit to the Department a complete application, along with the appropriate fee as set forth in N.J.A.C. 7:28-19.10(b). The Department will forward all complete applications to the Board for its

consideration. If the application is incomplete, the Department shall notify the school. The school will be provided an opportunity to complete the application within 90 calendar days of receipt of such notice. If after 90 days the application is still incomplete, it will be forwarded as an incomplete application for the Board's consideration. A complete application shall include:

- 1. The name, address and contact information of the school:
- 2. The name and credentials of the program director(s);
- 3. The name and credentials of each instructor and the courses he or she teaches; and
- 4. A report(s) describing the school's policies and procedures in place to ensure that:
 - Only qualified applicants are admitted into the program, in accordance with N.J.A.C. 7:28-19.11;
 - ii. Clinical education is performed properly and under appropriate supervision, in accordance with N.J.A.C. 7:28-19.12; and
 - iii. The educational curriculum includes all Board required elements, in accordance with N.J.A.C. 7:27-19.13.
- (b) After review of the school's application, the Board may either award approval or provisional approval to the school or deny the application.
- 1. The Board shall notify a school that has been awarded provisional approval each requirement that must be satisfied in order for the school to be awarded approval. Provisional approval shall be awarded only if the school agrees in writing to satisfy each requirement within a time period specified by the Board, and shall satisfy each requirement before non-provisional

approval is awarded. The Board shall terminate the provisional approval of a school that fails to satisfy the requirements within the specified time period.

- (c) A school whose application has been denied for any reason may submit a new application and fee in accordance with N.J.A.C. 7:28-19.14(a).
 - (d) A school of radiologic technology, including its clinical education centers, shall:
 - 1. Permit one or more Board representatives or Department employees to conduct a site inspection. The Board may accept the findings from a site inspection performed by a national accreditation agency recognized by the Board, in lieu of an inspection by the Board or the Department.
 - 2. Make available to the Board representative or Department employee such information, records, or persons that may be needed to determine compliance with the requirements of this subchapter; and
 - 3. Demonstrate, to the satisfaction of the Board, that it complies with the requirements of this subchapter.
- (e) In order to maintain approval, the school shall comply with the requirements of this subchapter and pay the appropriate annual fee as specified in N.J.A.C. 7:28-19.10(c). The

annual fee is due by January 1st of each year or 30 calendar days after the date that the Board awards approval under (b) above.

- (f) The Board may reduce the approval status of a school of radiologic technology to probationary approval for failure to comply with this subchapter, provided that the school agrees in writing to correct all items of noncompliance within a time period specified by the Board. The Board shall notify a school of radiologic technology of the reduction to probationary approval status and of the items of noncompliance resulting in such status.
 - (g) A school on probationary approval shall:
 - 1. Correct, within a period of time as determined by the Board, all specified deficiencies; and
 - 2. Notify each enrolled student and applicant, within 15 calendar days of receipt of notification from the Board of probationary approval status, by certified mail of the school's probationary approval status; and
 - 3. Submit to the Department, within 20 calendar days of receipt of notification of probationary approval status, a copy of the notice required in (g)2 above.
- (h) A school of radiologic technology may have its approval, provisional approval, or probationary approval terminated by the Board, upon the approval of the Commission, for failure

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OFFICIAL VERSION OF THE PROPOSAL, THE OFFICIAL VERSON WILL GOVERN.

to comply with this subchapter. The Department shall issue an administrative order to a school

of radiologic technology terminating the approval, which administrative order shall contain the

findings that led to the termination and specify the effective date of the termination.

(i) The approval of a school of radiologic technology may be terminated by the Board if the

school does not enroll students for a period of two consecutive years.

(j) A school of radiologic technology whose approval has been terminated may apply for

approval as a school of radiologic technology in accordance with this section.

(k) Any Board-approved school that makes a substantial change to its approved program,

including but not limited to a change in the type of certificate or degree awarded, or a change in

the owner or operator of the program, will be considered a new school and will be subject to the

application procedure of this section and fee specified in N.J.A.C. 7:28-19.10(b). The school

must notify the board of any change, in accordance with (f)14 above.

(1) A school whose application for approval is denied may request a hearing as provided by

N.J.A.C. 7:28-19.17(a) if aggrieved by the Board's actions.

(m) A Board-approved school whose approval is terminated or reduced to probationary may

request a hearing as provided by N.J.A.C. 7:28-19.17(b) if aggrieved by the Board's actions.

7:28-19.15 List of approved schools

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A list of approved schools of radiologic technology may be obtained by contacting the Department's Bureau of Radiological Health at PO Box 415, Trenton, NJ 08625-0415.

7:28-19.16 Radiologist Assistants - schools and practice

- (a) A diagnostic radiologic technologist who holds a valid license from the Board, has completed a radiologist assistant program that is recognized by the Board, and is certified by the American Registry of Radiologic Technologists as a radiologist assistant, is permitted to perform non-invasive fluoroscopic procedures, as defined in N.J.A.C. 7:28-19.2, under the supervision of a radiologist.
- (b) The Board will recognize a radiologist assistant program in which the educational curriculum contains, at a minimum, the following content: patient assessment; management and education; pharmacology and clinical decision making in radiology; contrast media; pathophysiology; radiographic and fluoroscopic procedures; fluoroscopic unit operation and safety; radiation safety; radiation biology; health physics; image correlation to anatomy, physiology and pathology; clinical pathways related to radiology; quality of care review and audit; directed readings and research; medico-legal and professional standards and governmental standards; and clinical education, which includes testing to determine clinical competency. The curriculum may follow the American Society of Radiologic Technologists curriculum or any nationally recognized curriculum, provided that it does not conflict with this section.

- (c) A radiologist assistant shall comply with all other State regulations regarding his or her practice in New Jersey.
- (d) A radiologist assistant student who is enrolled in and attending a Board recognized school, who is acting within the school's curriculum and possesses a valid diagnostic radiologic technology license issued by the Board, is permitted to perform non-invasive fluoroscopic procedures in New Jersey under the appropriate supervision as prescribed in (g)6 below.
- (e) No person shall perform non-invasive fluoroscopic procedures unless the person is a licensed practitioner who is acting within the scope of his or her license or meets the requirements of (a) or (d) above.
- (f) No owner, licensed practitioner, or registrant of ionizing radiation-producing equipment shall cause, allow, or permit any person to perform non-invasive fluoroscopic procedures unless that person is a licensed practitioner who is acting within the scope of his or her license or meets the requirements of (a) or (d) above.
- (g) Any school with a radiologist assistant program that assigns radiologist assistant students to a New Jersey facility for clinical education shall:
 - 1. Be recognized by the Board;

- 2. Ensure that all assigned students possess and maintain a valid diagnostic radiologic technology license issued by the Board;
- 3. Develop and implement a log to track fluoroscopic procedures that are performed by each radiologist assistant student. This log shall include, but not be limited to, the name of the student, the procedure performed, the name of the supervisor responsible for the procedure, the type of supervision provided and the fluoroscopic time used. The school shall ensure that the log is reviewed at least weekly by the supervising radiologist. If a trend of unexplained high use of fluoroscopic time is identified, the school shall ensure that corrective action by the supervising radiologist is implemented and recorded in the student's file;
- 4. Develop and implement an educational plan for competency based clinical education, which shall include, but not be limited to, didactic and laboratory instruction, clinical practice, clinical competency testing and remediation for failed competency evaluations. The school shall ensure that no person other than a radiologist determines clinical competency;
- 5. Prior to the start of the assignment, inform the Department of the location where the radiologist assistant student will be assigned for clinical education, the name of each supervising radiologist, and the length of the assignment;
- 6. Ensure that all assigned radiologist assistant students perform non-invasive fluoroscopic procedures as prescribed below under the appropriate level of supervision of a radiologist or a radiologist assistant who meets the requirements in (a) above:

- i. Only a radiologist can determine whether a student is clinically competent to perform a non-invasive fluoroscopic procedure.
- ii. Until a student is determined to be clinically competent in a given non-invasive fluoroscopic procedure, the student must perform that procedure under direct supervision by a supervising radiologist or radiologist assistant who meets the requirements in (a) above.
- iii. After a student is determined to be clinically competent in a given non-invasive fluoroscopic procedure, the student may perform that procedure without direct supervision, provided that a radiologist or a radiologist assistant who meets the requirements in (a) above is on-site and immediately available to furnish assistance and direction throughout the performance of the procedure; and
- 7. Provide remedial instruction for any procedure that is performed by a radiologist assistant student and found to be unacceptable by the supervising radiologist or radiologist assistant who meets the requirements in (a) above. If the student's performance of the procedure is determined to be unacceptable after a student has been determined to be clinically competent, the school shall ensure that the student's performance of the procedure is directly supervised as required in (g)6ii above until a radiologist determines that the student is clinically competent to perform that procedure. All remedial instruction shall be documented in the student's file.
- (h) No school shall assign a radiologist assistant student to a New Jersey facility for clinical education unless the school complies with (b) and (g) above.

7:28-19.17 Procedures for requesting and conducting adjudicatory hearings

(a) Subject to the limitation on third-party hearing rights specified in (f) below, an applicant for examination, license or Board-approval for a radiologic technology school, or any person who believes that he or she is aggrieved by any Board finding as it relates to such an application may contest the decision and request a contested case hearing.

The request shall be made in writing to the Department at the address listed in (e) below within 20 calendar days from receipt of the Board's findings.

The person requesting the hearing shall include the following information in each hearing request:

- 1. The name, address, and telephone number of the applicant and its authorized representative;
 - 2. The date the applicant received the Board finding;
 - 3. A copy of the finding and a list of all issues being appealed:
 - 4. The defenses to each of the Board's findings of fact stated in short and plain terms;
- 5. An admission or denial of each of the Board's findings. If the person is without knowledge or information sufficient to form a belief as to the truth of a finding, the applicant shall so state and this shall have the effect of a denial. A denial shall fairly meet the substance of the findings denied. When the applicant intends in good faith to deny only a part or a qualification of a finding, the applicant shall specify so much of it as is true and material and deny only the remainder. The person may not generally deny all of the findings, but shall make all denials as specific denials of designated findings. For each finding the person denies, the person shall state the fact or facts as the applicant believes it or them to be,

- 6. Information supporting the request and specific reference to or copies of other written documents relied upon to support the request,
 - 7. An estimate of the time required for the hearing (in days and/or hours); and
- 8. A request, if necessary, for a barrier-free hearing location for physically disable persons.
- (b) Subject to the limitation on third-party hearing rights specified in (f) below, a licensed technologist, applicant for license renewal, or Board-approved school, or any person who believes that he or she is aggrieved by any Board finding or an administrative order issued pursuant to this subchapter may contest the finding or administrative order and request a contested case hearing. The person requesting the hearing shall submit an original request in writing to the Department at the address at (e) below within 20 calendar days after the violator's receipt of the administrative order.

The person requesting the hearing shall include the following information in each hearing request:

- 1. The name, address, and telephone number of the person requesting the hearing and any authorized representative;
- 2. The date the person requesting the hearing received the Board's finding or administrative order being contested;
- 3. A copy of the Board's finding or administrative order and a list of all issues being appealed;
 - 4. The person's defenses to each of the findings of fact, stated in short and plain terms;

- 5. An admission or denial of each of the findings of fact. If the person requesting the hearing is without knowledge or information sufficient to form a belief as to the truth of a finding, the person shall so state and this shall have the effect of a denial. A denial shall fairly meet the substance of the findings denied. When the person intends in good faith to deny only a part or a qualification of a finding, the person shall specify so much of it as is true and material and deny only the remainder. The person may not generally deny all of the findings of fact, but shall make all denials as specific denials of designated findings. For each finding of fact the person requesting the hearing denies, the person shall state the fact or facts as the violator believes it or them to be;
- 6. Information supporting the request and specific reference to or copies of other written documents relied upon to support the request;
 - 7. An estimate of the time required for the hearing (in days and/or hours); and
- 8. A request, if necessary, for a barrier-free hearing location for physically disabled persons.
- (c) The Department shall deny the hearing request if:
- 1. The applicant or person requesting the hearing fails to include all the information required by (a) or (b) above; or
- 2. The Department does not receive the request within 20 calendar days after the applicant or person requesting the hearing received the Board's finding or administrative order being contested.
- (d) The Department shall conduct all adjudicatory hearings in accordance with the

Administrative Procedure Act, N.J.S.A. 52:1413-1 et seq., and the Uniform Administrative Procedure Rules, N.J.A.C 1:1.

(e) The applicant or violator shall send the request for an adjudicatory hearing to:

The Office of Legal Affairs

New Jersey Department of Environmental Protection

401 East State Street, Fourth Floor

PO Box 402

Trenton, New Jersey 08625-0402

Attention: Hearing Request; and

New Jersey Department of Environmental Protection

Bureau of Radiological Health

25 Arctic Parkway

PO Box 415

Trenton, New Jersey 08625-0415

Attention: Hearing Request

(f) Nothing in this section shall be construed to provide a right to an adjudicatory hearing in contravention of N.J.S.A. 52:14B-3.1 through 3.3.

7:28-19.18 Severability

Each section of this subchapter is severable. In the event that any section, subsection or division, or application thereof, is held invalid in a court of law, the remainder of this subchapter shall continue in full force and effect.