

**Licenses for Industrial Radiography and Radiation Safety – Requirements for Industrial Radiography Operations  
(62 FR 28948, May 28, 1997) RATS ID 1997-5 Effective June 27, 1997**

<b>Change to NRC Section</b>	<b>Title</b>	<b>State Section</b>	<b>Compatibility Category</b>	<b>Summary of Change to CFR</b>	<b>Difference Yes/No</b>	<b>Significant Yes/No</b>	<b>If Difference, Why or Why Not Was a Comment Generated</b>
§30.4			N/A	In Sec. 30.4, the definitions of Radiographer, Radiographer's assistant, and Radiography are removed			
§34.1	Purpose and scope		D	N/A	N/A		
§34.3	Definitions		A	<b>Amended Definition:</b> ALARA (acronym for "as low as is reasonably achievable") means making every reasonable effort to maintain exposures to radiation as far below the dose limits specified in 10 CFR Part 20 as is practical consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to utilization of nuclear energy and licensed materials in the public interest.			
§34.3	Definitions		C	<b>Amended Definition:</b> Annual refresher safety training means a review conducted or provided by the licensee for its			

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				employees on radiation safety aspects of industrial radiography. The review may include, as appropriate, the results of internal inspections, new procedures or equipment, new or revised regulations, accidents or errors that have been observed, and should also provide opportunities for employees to ask safety questions.			
§34.3	Definitions		C	<b>Amended Definition:</b> Associated equipment means equipment that is used in conjunction with a radiographic exposure device to make radiographic exposures that drives, guides, or comes in contact with the source, (e.g., guide tube, control tube, control (drive) cable, removable source stop, "J" tube and collimator when it is used as an exposure head.			
§34.3	Definitions		A	<b>Amended Definition:</b> Becquerel (Bq) means one disintegration per second.			
§34.3	Definitions		B	<b>Amended Definition:</b> Certifying Entity means an independent certifying organization meeting the requirements in appendix A of this part or an Agreement State meeting the requirements in appendix A, Parts II and III of this part.			

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§34.3	Definitions		B	<b>Amended Definition:</b> Collimator means a radiation shield that is placed on the end of the guide tube or directly onto a radiographic exposure device to restrict the size of the radiation beam when the sealed source is cranked into position to make a radiographic exposure.			
§34.3	Definitions		B	<b>Amended Definition:</b> Control (drive) cable means the cable that is connected to the source assembly and used to drive the source to and from the exposure location.			
§34.3	Definitions		B	<b>Amended Definition:</b> Control drive mechanism means a device that enables the source assembly to be moved to and from the exposure device.			
§34.3	Definitions		B	<b>Amended Definition:</b> Control tube means a protective sheath for guiding the control cable. The control tube connects the control drive mechanism to the radiographic exposure device.			
§34.3	Definitions		B	<b>Amended Definition:</b> Exposure head means a device that locates the gamma radiography sealed source in the selected working position. (An exposure head is also known as a source stop.)			

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§34.3	Definitions		C	<b>Amended Definition:</b> Field station means a facility where licensed material may be stored or used and from which equipment is dispatched.			
§34.3	Definitions		A	<b>Amended Definition:</b> Gray means the SI unit of absorbed dose. One gray is equal to an absorbed dose of 1 Joule/kilogram. It is also equal to 100 rads.			
§34.3	Definitions		B	<b>Amended Definition:</b> Guide tube (Projection sheath) means a flexible or rigid tube (i.e., "J" tube) for guiding the source assembly and the attached control cable from the exposure device to the exposure head. The guide tube may also include the connections necessary for attachment to the exposure device and to the exposure head.			
§34.3	Definitions		C	<b>Amended Definition:</b> Hands-on experience means experience in all of those areas considered to be directly involved in the radiography process.			
§34.3	Definitions		B	<b>Amended Definition:</b> Independent certifying organization means an independent organization that meets all of the criteria of Appendix A to this part.			

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§34.3	Definitions		B	<b>Amended Definition:</b> Industrial radiography (radiography) means an examination of the structure of materials by nondestructive methods, utilizing ionizing radiation to make radiographic images.			
§34.3	Definitions		B- for States that authorize licensees to perform radiography  D- for other States	<b>Amended Definition:</b> Lay-barge radiography means industrial radiography performed on any water vessel used for laying pipe.			
§34.3	Definitions		B- for States that authorize licensees to perform radiography  D- for other States	<b>Amended Definition:</b> Offshore platform radiography means industrial radiography conducted from a platform over a body of water.			
§34.3	Definitions		C	<b>Amended Definition:</b> Permanent radiographic installation means an enclosed shielded room, cell, or vault, not located at a temporary jobsite, in which radiography is performed.			
§34.3	Definitions		C	<b>Amended Definition:</b> Practical Examination means a demonstration through practical application of the safety rules			

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				and principles in industrial radiography including use of all appropriate equipment and procedures.			
§34.3	Definitions		C	<b>Amended Definition:</b> Radiation Safety Officer for industrial radiography means an individual with the responsibility for the overall radiation safety program on behalf of the licensee and who meets the requirements of Sec. 34.42.			
§34.3	Definitions		C	<b>Amended Definition:</b> Radiographer means any individual who performs or who, in attendance at the site where the sealed source or sources are being used, personally supervises industrial radiographic operations and who is responsible to the licensee for assuring compliance with the requirements of the Commission's regulations and the conditions of the license.			
§34.3	Definitions		C	<b>Amended Definition:</b> Radiographer certification means written approval received from a certifying entity stating that an individual has satisfactorily met certain established radiation safety, testing, and experience criteria.			

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§34.3	Definitions		<p>B- for States that authorize the use of radiographer's assistants</p> <p>D- for other States</p>	<p><b>Amended Definition:</b>  Radiographer's assistant means any individual who under the direct supervision of a radiographer, uses radiographic exposure devices, sealed sources or related handling tools, or radiation survey instruments in industrial radiography.</p>			
§34.3	Definitions		B	<p><b>Amended Definition:</b>  Radiographic exposure device (also called a camera, or a projector) means any instrument containing a sealed source fastened or contained therein, in which the sealed source or shielding thereof may be moved, or otherwise changed, from a shielded to unshielded position for purposes of making a radiographic exposure.</p>			
§34.3	Definitions		C	<p><b>Amended Definition:</b>  Radiographic operations means all activities associated with the presence of radioactive sources in a radiographic exposure device during use of the device or transport (except when being transported by a common or contract transport), to include surveys to confirm the adequacy of boundaries, setting up equipment and any activity inside restricted area boundaries.</p>			

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§34.3	Definitions		B	<b>Amended Definition:</b> S-tube means a tube through which the radioactive source travels when inside a radiographic exposure device.			
§34.3	Definitions		[A]	<b>Amended Definition:</b> Sealed source means any byproduct material that is encased in a capsule designed to prevent leakage or escape of the byproduct material.			
§34.3	Definitions		C	<b>Amended Definition:</b> Shielded position means the location within the radiographic exposure device or source changer where the sealed source is secured and restricted from movement.			
§34.3	Definitions		A	<b>Amended Definition:</b> Sievert means the SI unit of any of the quantities expressed as dose equivalent. The dose equivalent in sieverts is equal to the absorbed dose in grays multiplied by the quality factor (1 Sv = 100 rems)			

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§34.3	Definitions		B	<p><b>Amended Definition:</b> Source assembly means an assembly that consists of the sealed source and a connector that attaches the source to the control cable. The source assembly may also include a stop ball used to secure the source in the shielded position.</p>			
§34.3	Definitions		B	<p><b>Amended Definition:</b> Source changer means a device designed and used for replacement of sealed sources in radiographic exposure devices, including those also used for transporting and storage of sealed sources.</p>			
§34.3	Definitions		D	<p><b>Amended Definition:</b> Storage area means any location, facility, or vehicle which is used to store or to secure a radiographic exposure device, a storage container, or a sealed source when it is not in use and which is locked or has a physical barrier to prevent accidental exposure, tampering with, or unauthorized removal of the device, container, or source.</p>			
§34.3	Definitions		B	<p><b>Amended Definition:</b> Storage container means a container in which sealed sources are secured and stored.</p>			

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§34.3	Definitions		B	<b>Amended Definition:</b> Temporary jobsite means a location where radiographic operations are conducted and where licensed material may be stored other than those location(s) of use authorized on the license.			
§34.3	Definitions		B- for States that authorize under-water radiography  D- for other States	<b>Amended Definition:</b> Underwater radiography means industrial radiography performed when the radiographic exposure device and/or related equipment are beneath the surface of the water.			
§34.13	Specific license for industrial radiography		C	<b>Sec. 34.13 is revised to read as follows:</b> For full text please 10 CFR			
§34.20	Performance requirements for industrial radiography equipment		B	<b>Sec. 34.20 is revised to read as follows:</b> For full text please see 10 CFR			
§34.20 (a)(2)	Performance requirements for industrial radiography equipment		D	N/A	N/A		
§34.21	Limits on external radiation levels from storage		B	<b>Sec. 34.21 is revised to read as follows:</b> The maximum exposure rate limits for storage containers and			

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	containers and source changers			source changers are 2 millisieverts (200 millirem) per hour at any exterior surface, and 0.1 millisieverts (10 millirem) per hour at 1 meter from any exterior surface with the sealed source in the shielded position.			
§34.23	Locking of radiographic exposure devices, storage containers and source changers		B	<p><b>Sec. 34.23 is revised to read as follows:</b></p> <p>(a) Each radiographic exposure device must have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The exposure device and/or its container must be kept locked (and if a keyed-lock, with the key removed at all times) when not under the direct surveillance of a radiographer or a radiographer's assistant except at permanent radiographic installations as stated in Sec. 34.51. In addition, during radiographic operations the sealed source assembly must be secured in the shielded position each time the source is returned to that position.</p> <p>(b) Each sealed source storage container and source changer must have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position.</p>			

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				Storage containers and source changers must be kept locked (and if a keyed-lock, with the key removed at all times) when containing sealed sources except when under the direct surveillance of a radiographer or a radiographer's assistant.			
§34.25	Radiation survey instruments		C	<p><b>Sec. 34.25 is revised to read as follows:</b></p> <p>(a) The licensee shall keep sufficient calibrated and operable radiation survey instruments at each location where radioactive material is present to make the radiation surveys required by this part and by 10 CFR Part 20 of this chapter. Instrumentation required by this section must be capable of measuring a range from 0.02 millisieverts (2 millirems) per hour through 0.01 Sievert (1 rem) per hour.</p> <p>(b) The licensee shall have each radiation survey instrument required under paragraph (a) of this section calibrated--</p> <p>(1) At intervals not to exceed 6 months and after instrument servicing, except for battery changes;</p> <p>(2) For linear scale instruments, at two points located approximately one-third and two-thirds of full-scale on each scale; for logarithmic scale instruments, at mid-range of</p>			

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				each decade, and at two points of at least one decade; and for digital instruments, at 3 points between 0.02 and 10 millisieverts (2 and 1000 millirems) per hour; and (3) So that an accuracy within plus or minus 20 percent of the calibration source can be demonstrated at each point checked. (c) The licensee shall maintain records of the results of the instrument calibrations in accordance with Sec. 34.65.			
§34.27	Leak testing and replacement of sealed sources		C	<b>Sec. 34.27 is revised to read as follows:</b> For full text please see 10 CFR			
§34.29	Quarterly inventory		C	<b>Sec. 34.29 is revised to read as follows:</b> (a) Each licensee shall conduct a quarterly physical inventory to account for all sealed sources and for devices containing depleted uranium received and possessed under this license. (b) The licensee shall maintain records of the quarterly inventory in accordance with Sec. 34.69.			
§34.31	Inspection and maintenance of radiographic exposure devices, transport and storage		C	<b>Sec. 34.29 is revised to read as follows:</b> (a) The licensee shall perform visual and operability checks on survey meters, radiographic exposure devices, transport and storage containers, associated			

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	containers, associated equipment, source changers, and survey instruments			<p>equipment and source changers before use on each day the equipment is to be used to ensure that the equipment is in good working condition, that the sources are adequately shielded, and that required labeling is present. Survey instrument operability must be performed using check sources or other appropriate means. If equipment problems are found, the equipment must be removed from service until repaired.</p> <p>(b) Each licensee shall have written procedures for:</p> <p>(1) Inspection and routine maintenance of radiographic exposure devices, source changers, associated equipment, transport and storage containers, and survey instruments at intervals not to exceed 3 months or before the first use thereafter to ensure the proper functioning of components important to safety. Replacement components shall meet design specifications. If equipment problems are found, the equipment must be removed from service until repaired.</p> <p>(2) Inspection and maintenance necessary to maintain the Type B packaging used to transport radioactive materials. The inspection and maintenance program must include procedures to assure that Type B packages are shipped</p>			

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				and maintained in accordance with the certificate of compliance or other approval.(c) Records of equipment problems and of any maintenance performed under paragraphs (a) and (b) of this section must be made in accordance with Sec. 34.73.			
§34.33	Permanent radiographic installations		H&S	<b>Sec. 34.33 is revised to read as follows:</b> For full text please see 10 CFR			
§34.35	Labeling, storage, and transportation		B	<b>Sec. 34.35 is revised to read as follows:</b> For full text please see 10 CFR			
§34.41 (a) & (b)	Conducting industrial radiographic operations		B	<b>Sec. 34.35 is revised to read as follows:</b> (a) Whenever radiography is performed at a location other than a permanent radiographic installation, the radiographer must be accompanied by at least one other qualified radiographer or an individual who has at a minimum met the requirements of Sec. 34.43(c). The additional qualified individual shall observe the operations and be capable of providing immediate assistance to prevent unauthorized entry. Radiography may not be performed if only one qualified individual is present. (b) All radiographic operations conducted at locations of use authorized on the license must			

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				be conducted in a permanent radiographic installation, unless specifically authorized by the Commission.			
§34.41 (c)	Conducting industrial radiographic operations		B for States which authorize offshore platform or under-water radiography  D- for other States	<b>Sec. 34.35 is revised to read as follows:</b> (c) A licensee may conduct lay-barge, offshore platform, or underwater radiography only if procedures have been approved by the Commission or by an Agreement State.			
§34.41 (d)	Conducting industrial radiographic operations		D	N/A	N/A		
§34.42	Radiation Safety Officer for industrial radiography		D	N/A	N/A		
§34.42 First sentence	Radiation Safety Officer for industrial radiography		H&S	<b>Sec. 34.42 is revised to read as follows:</b> For full text please see 10 CFR			
§34.42 (a)	Radiation Safety Officer for industrial radiography		C	<b>Sec. 34.42 is revised to read as follows:</b> For full text please see 10 CFR			

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§34.43 (a), (a)(1), (b), (d), (e), (f), (g), (h), & (i)	Training		B	<b>Sec. 34.43 is revised to read as follows:</b> For full text please see 10 CFR			
§34.43 (a)(2)	Training		D	N/A	N/A		
§34.43 (c)	Training		B - for States that authorize the use of radiographer's assistants and D- for other States.	<b>Sec. 34.43 is revised to read as follows:</b> For full text please see 10 CFR			
§34.45 (a), (a)(1-8), & (a)(10-13)	Operating and emergency procedures		C	<b>Sec. 34.45 is revised to read as follows:</b> For full text please see 10 CFR			
§34.45 (a)(9) & (b)	Operating and emergency procedures		D	N/A	N/A		
§34.46	Supervision of radiographers' assistants		B- for States that authorize the use of radiographer's assistants  D- for other States	<b>Sec. 34.46 is revised to read as follows:</b> Whenever a radiographer's assistant uses radiographic exposure devices, associated equipment or sealed sources or conducts radiation surveys required by Sec. 34.49(b) to determine that the sealed source			

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				<p>has returned to the shielded position after an exposure, the assistant shall be under the personal supervision of a radiographer. The personal supervision must include:</p> <ul style="list-style-type: none"> <li>(a) The radiographer's physical presence at the site where the sealed sources are being used;</li> <li>(b) The availability of the radiographer to give immediate assistance if required; and</li> <li>(c) The radiographer's direct observation of the assistant's performance of the operations referred to in this section.</li> </ul>			
§34.47	Personnel monitoring		C	<p><b>Sec. 34.47 is revised to read as follows:</b> For full text please see 10 CFR</p>			
§34.49 (a)(b)(c)	Radiation surveys		C	<p><b>Sec. 34.47 is revised to read as follows:</b> The licensee shall:</p> <ul style="list-style-type: none"> <li>(a) Conduct surveys with a calibrated and operable radiation survey instrument that meets the requirements of Sec. 34.25.</li> <li>(b) Using a survey instrument meeting the requirements of paragraph (a) of this section, conduct a survey of the radiographic exposure device and the guide tube after each exposure when approaching the device or the guide tube. The survey must determine that the sealed source</li> </ul>			

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				<p>has returned to its shielded position before exchanging films, repositioning the exposure head, or dismantling equipment.</p> <p>(c) Conduct a survey of the radiographic exposure device with a calibrated radiation survey instrument any time the source is exchanged and whenever a radiographic exposure device is placed in a storage area (as defined in Sec. 34.3), to ensure that the sealed source is in its shielded position.</p>			
§34.49 (d)	Radiation surveys		D	N/A	N/A		
§34.51	Surveillance		C	<p><b>Sec. 34.51 is revised to read as follows:</b> During each radiographic operation the radiographer, or the other individual present, as required by Sec. 34.41, shall maintain continuous direct visual surveillance of the operation to protect against unauthorized entry into a high radiation area, as defined in 10 CFR part 20 of this chapter, except at permanent radiographic installations where all entryways are locked and the requirements of Sec. 34.33 are met.</p>			
§34.53	Posting		C	<p><b>Sec. 34.53 is revised to read as follows:</b> All areas in which industrial radiography is being performed</p>			

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				must be conspicuously posted as required by Sec. 20.1902 of this chapter. Exceptions listed in Sec. 20.1903 of this chapter do not apply to industrial radiographic operations.			
§34.61	Records of the specific license for industrial radiography		D	N/A	N/A		
§34.63	Records of receipt and transfer of sealed sources		C	<p><b>Sec. 34.63 is revised to read as follows:</b></p> <p>(a) Each licensee shall maintain records showing the receipts and transfers of sealed sources and devices using DU for shielding and retain each record for 3 years after it is made.</p> <p>(b) These records must include the date, the name of the individual making the record, radionuclide, number of Becquerels (Curies) or mass (for DU), and manufacturer, model, and serial number of each sealed source and/or device, as appropriate.</p>			
§34.65	Records of radiation survey instruments		C	<p><b>Sec. 34.63 is revised to read as follows:</b></p> <p>Each licensee shall maintain records of the calibrations of its radiation survey instruments that are required under Sec. 34.25 and retain each record for 3 years after it is made.</p>			

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§34.67	Records of leak testing of sealed sources and devices containing depleted uranium		C	<p><b>Sec. 34.67 is revised to read as follows:</b>  Each licensee shall maintain records of leak test results for sealed sources and for devices containing DU. The results must be stated in units of becquerels (microcuries). The licensee shall retain each record for 3 years after it is made or until the source in storage is removed</p>			
§34.69	Records of quarterly inventory		C	<p><b>Sec. 34.69 is revised to read as follows:</b>  (a) Each licensee shall maintain records of the quarterly inventory of sealed sources and of devices containing depleted uranium as required by Sec. 34.29 and retain each record for 3 years after it is made.  (b) The record must include the date of the inventory, name of the individual conducting the inventory, radionuclide, number of becquerels (curies) or mass (for DU) in each device, location of sealed source and/or devices, and manufacturer, model, and serial number of each sealed source and/or device, as appropriate.</p>			
§34.71	Utilization logs		B	<p><b>Sec. 34.71 is revised to read as follows:</b>  (a) Each licensee shall maintain utilization logs showing for each sealed source the following</p>			

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				<p>information:</p> <p>(1) A description, including the make, model, and serial number of the radiographic exposure device or transport or storage container in which the sealed source is located;</p> <p>(2) The identity and signature of the radiographer to whom assigned; and</p> <p>(3) The plant or site where used and dates of use, including the dates removed and returned to storage.</p> <p>(b) The licensee shall retain the logs required by paragraph (a) of this section for 3 years after the log is made.</p>			
§34.73	Records of inspection and maintenance of radiographic exposure devices, transport and storage containers, associated equipment, source changers, and survey instruments		C	<p><b>Sec. 34.73 is revised to read as follows:</b></p> <p>(a) Each licensee shall maintain records specified in Sec. 34.31 of equipment problems found in daily checks and quarterly inspections of radiographic exposure devices, transport and storage containers, associated equipment, source changers, and survey instruments; and retain each record for 3 years after it is made.</p> <p>(b) The record must include the date of check or inspection, name of inspector, equipment involved, any problems found, and what repair and/or maintenance, if any, was done.</p>			

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§34.75	Records of alarm system and entrance control checks at permanent radiographic installations		D	N/A	N/A		
§34.79	Records of training and certification		C	<p><b>Sec. 34.79 is revised to read as follows:</b></p> <p>Each licensee shall maintain the following records (of training and certification) for 3 years after the record is made:</p> <p>(a) Records of training of each radiographer and each radiographer's assistant. The record must include radiographer certification documents and verification of certification status, copies of written tests, dates of oral and practical examinations, and names of individuals conducting and receiving the oral and practical examinations; and</p> <p>(b) Records of annual refresher safety training and semi-annual inspections of job performance for each radiographer and each radiographer's assistant. The records must list the topics discussed during the refresher safety training, the dates the annual refresher safety training was conducted, and names of the instructors and attendees.</p>			

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				For inspections of job performance, the records must also include a list showing the items checked and any non-compliances observed by the RSO.			
§34.81	Copies of operating and emergency procedures		C	<p><b>Sec. 34.81 is revised to read as follows:</b>  Each licensee shall maintain a copy of current operating and emergency procedures until the Commission terminates the license. Superseded material must be retained for 3 years after the change is made.</p>			
§34.83	Records of personnel monitoring Procedures		C	<p><b>Sec. 34.79 is revised to read as follows:</b>  Each licensee shall maintain the following exposure records specified in Sec. 34.47:</p> <ul style="list-style-type: none"> <li>(a) Direct reading dosimeter readings and yearly operability checks required by Sec. 34.47(b) and (c) for 3 years after the record is made.</li> <li>(b) Records of alarm ratemeter calibrations for 3 years after the record is made.</li> <li>(c) Reports received from the film badge or TLD processor until the Commission terminates the license.</li> <li>(d) Records of estimates of exposures as a result of: off-scale personal direct reading dosimeters, or lost or damaged film badges or TLDs, until the Commission terminates the</li> </ul>			

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§34.85	Records of Radiation Surveys		D	N/A	N/A		
§34.87	Form of records		C	<p><b>Sec. 34.87 is revised to read as follows:</b></p> <p>Each record required by this part must be legible throughout the specified retention period. The record may be the original or a reproduced copy or a microform provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of reproducing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records, such as letters, drawings, and specifications, must include all pertinent information, such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.</p>			
§34.89	Location of documents and records		C	<p><b>Sec. 34.89 is revised to read as follows:</b> For full text please see 10 CFR</p>			

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§34.101	Notifications		C	<b>Sec. 34.101 is revised to read as follows:</b> For full text please see 10 CFR			
§34.111	Applications for exemptions		D	N/A	N/A		
§34.121	Violations		D	N/A	N/A		
§34.123	Criminal penalties		D	N/A	N/A		
Appendix A to 10 CFR Part 34	Appendix A		B	Appendix A to 10 CFR Part 34 appears as an attachment to this document.			

### **Appendix A to 10 CFR Part 34--Radiographer Certification**

#### I. Requirements for an Independent Certifying Organization

An independent certifying organization shall:

1. Be an organization such as a society or association, whose members participate in, or have an interest in, the fields of industrial radiography;
2. Make its membership available to the general public nationwide that is not restricted because of race, color, religion, sex, age, national origin or disability;
3. Have a certification program open to nonmembers, as well as members;
4. Be an incorporated, nationally recognized organization that is involved in setting national standards of practice within its fields of expertise;
5. Have an adequate staff, a viable system for financing its operations, and a policy-and decision-making review board;
6. Have a set of written organizational by-laws and policies that provide adequate assurance of lack of conflict of interest and a system for monitoring and enforcing those by-laws and policies;
7. Have a committee, whose members can carry out their responsibilities impartially, to review and approve the certification guidelines and procedures, and to advise the organization's staff in implementing the certification program;
8. Have a committee, whose members can carry out their responsibilities impartially, to review complaints against certified individuals and to determine appropriate sanctions;

9. Have written procedures describing all aspects of its certification program maintain records of the current status of each individual's certification and the administration of its certification program;
10. Have procedures to ensure that certified individuals are provided due process with respect to the administration of its certification program, including the process of becoming certified and any sanctions imposed against certified individuals;
11. Have procedures for proctoring examinations, including qualifications for proctors. These procedures must ensure that the individuals proctoring each examination are not employed by the same company or corporation (or a wholly-owned subsidiary of such company or corporation) as any of the examinees;
12. Exchange information about certified individuals with the Commission and other independent certifying organizations and/or Agreement States and allow periodic review of its certification program and related records; and
13. Provide a description to the Commission of its procedures for choosing examination sites and for providing an appropriate examination environment.

## II. Requirements for Certification Programs

All certification programs must:

1. Require applicants for certification to (a) receive training in the topics set forth in Sec. 34.43(g) or equivalent Agreement State regulations, and (b) satisfactorily complete a written examination covering these topics;
2. Require applicants for certification to provide documentation that demonstrates that the applicant has: (a) received training in the topics set forth in Sec. 34.43(g) or equivalent Agreement State regulations; (b) satisfactorily completed a minimum period of on-the-job training; and (c) has received verification by an Agreement State or a NRC licensee that the applicant has demonstrated the capability of independently working as a radiographer;
3. Include procedures to ensure that all examination questions are protected from disclosure;
4. Include procedures for denying an application, revoking, suspending, and reinstating a certificate;
5. Provide a certification period of not less than 3 years nor more than 5 years;
6. Include procedures for renewing certifications and, if the procedures allow renewals without examination, require evidence of recent full-time employment and annual refresher training.
7. Provide a timely response to inquiries, by telephone or letter, from members of the public, about an individual's certification status.

## III. Requirements for Written Examinations

All examinations must be:

1. Designed to test an individual's knowledge and understanding of the topics listed in Sec. 34.43(g) or equivalent Agreement State requirements;
2. Written in a multiple-choice format;
3. Have test items drawn from a question bank containing psychometrically valid questions based on the material in Sec. 34.43(g).