



IEMA-OHS OFFICE OF NUCLEAR SAFETY

1035 OUTER PARK DRIVE

SPRINGFIELD, ILLINOIS 62704

Application Form for Radioactive Material License

APPLICATION INSTRUCTIONS:

This application is intended for use in requesting a new license or renewing an existing license for radioactive material uses not otherwise addressed by an IEMA-OHS Instructional Set. This form, in combination with applicable U.S. Nuclear Regulatory Commission (NRC) NUREG-1556 guidance document(s), should be utilized until the Agency develops use-specific applications and instructional sets.

Item 1: Identify all requested types of use. Where available, the applicable NRC NUREG-1556 volumes that best characterize the proposed type(s) of radioactive material use are provided. Utilize these references to help align application content with current risk-informed, performance-based licensing practices. *NOTE:* Applications for medical use, fixed or portable gauges and industrial radiography have a use-specific application available on the Agency website.

Complete all applicable items. If an item does not apply, indicate "N/A" and briefly explain why. Use supplementary sheets where necessary and label attachments clearly by item number.

Where guidance in a selected NUREG references federal requirements (e.g., 10 CFR), applicants must instead reference the appropriate **Illinois regulations** (e.g., 32 Ill. Adm. Code).

Each item on the application should provide sufficient detail for the Agency to determine that equipment, facilities, training, experience, and the radiation protection program are adequate to protect the health, safety, and minimize danger to life and property.

NOTE: The order in which information is requested in this application may not match the order or exact content of every NUREG-1556 volume. Applicants should provide complete responses to each item on this form and supplement responses as needed with information described by the applicable NUREG(s), including any use-specific or technical details not explicitly requested in this application.

If proposing alternative methods or procedures from those described in the applicable NUREG, the applicant must include adequate justification as to how a commensurate level of radiation safety and regulatory compliance will be ensured.

Identifying and Protecting Sensitive Information: Unless specifically requested by the Agency, avoid submitting proprietary, security-sensitive and personally identifiable information (PII). In accordance with 32 Ill. Adm. Code 330.240(c), all applications and other documents submitted to the Agency may be subject to public review. Due to their personal and security-sensitive nature, not all documents may be appropriate for public disclosure. Although there is no guarantee that the information will always be withheld, in order to assist the Agency in recognizing information identified as security-sensitive or containing PII, the applicant or licensee should identify and clearly mark the information accordingly before it is submitted to IEMA-OHS. Copies of security plans or other documents required under 32 Ill. Adm. Code Part 337 should not be submitted as a component of the application.

Retain a copy of the completed application. Submit the original signed application and all supporting documentation to:

IEMA-OHS, Office of Nuclear Safety
Radioactive Materials Division
1035 Outer Park Drive
Springfield, IL 62704

The Agency will accept applications and requests for amendments electronically. These submittals may be directed to ema.speclic@illinois.gov.

Incomplete applications or missing information may result in delays. IEMA-OHS may request additional clarification or documentation during the review process.

This State Agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under 32 Ill. Adm. Code 330. Disclosure of this information is required. Please be aware, however, that Agency rules require that an application for renewal of a specific license be filed with the Agency at least 30 days prior to the expiration date. This allows for licensed activities lawfully to continue beyond the expiration date pending Agency review of the renewal application, should such review extend beyond the expiration date. Failure to provide all requested information may result in denial of your application for radioactive material license issuance or renewal.

Item 1. This is an application for:

☐ New License **OR** ☐ Amendment ☐ Renewal of License Number:

Additionally, check all that apply:

Type of Use is characterized by:

- ☐ Self-Shielded Irradiator (NUREG 1556 Vol. 5)
- ☐ Panoramic Irradiator (32 Ill. Adm. Code Part 346) (NUREG 1556 Vol. 6)
- ☐ Academic, Research and Development, and Other Licenses of Limited Scope (NUREG 1556 Vol. 7)
- ☐ Broad Scope (NUREG 1556 Vol. 11)
- ☐ Manufacturing and Distribution (NUREG 1556 Vol. 12)
- ☐ Commercial Radiopharmacy (NUREG 1556 Vol. 13)
- ☐ Well Logging, Tracer, and Field Flood Study (NUREG 1556 Vol. 14)
- ☐ Distribution to General Licensees (NUREG 1556 Vol. 16)
- ☐ Special Nuclear Material of Less than Critical Mass (NUREG 1556 Vol. 17)
- ☐ Service Provider (NUREG 1556 Vol. 18)
- ☐ Possession Licenses for Production of Radioactive Material Using an Accelerator (NUREG 1556 Vol. 21)
- ☐ Source Material Facilities (32 Ill. Adm. Code Part 332)
- ☐ Other uses of Radioactive Material Not Specified Above. *Describe:* _____

Item 2. Applicant's name and mailing address

Applicant must be the legal entity or individual responsible for the license.

Licensee Name:

Address:

Email:

City, State, Zip:

Phone:

☐ Illinois Secretary of State Registration is attached. *(Or equivalent state business registration)*

Item 3. Address where radioactive material will be either: Used(only), Stored(only), or Both

If additional space is required, submit an attachment with the information required.

Site Address(es):	How will radioactive material be used at this location: <input type="checkbox"/> Used <input type="checkbox"/> Stored <input type="checkbox"/> Both Used and Stored	<input type="checkbox"/> The Applicant owns the property/facility. <input type="checkbox"/> The Applicant does not own the property. Attach letter signed by facility/owner acknowledging use/storage of RAM at this location. <input type="checkbox"/> Site is subject to 32 Ill. Adm. Code Part 337
City, State, Zip:		
Contact Name:	Phone:	Email:

☐ Request temporary jobsites (≤180 days during any consecutive twelve-month period)

Item 4. Person(s) authorized to act on behalf of licensee

If additional space is required, submit an attachment with the information required. Indicate if changes to person(s) previously authorized are needed.

Name:	Title:
Address:	Email:
City, State, Zip:	Phone:

☐ Full time employee of licensee **OR** ☐ Position and/or Relationship to the licensee:

If any individual listed above is unknown to the Agency (not listed on any license previously), complete the *Release and Authorization Full Due Diligence Form* to expedite processing of the application.

[IEMA Consent for Background Check \(illinois.gov\)](https://www.illinois.gov/ema/consent)

Items 5.1 And 6: Materials to Be Possessed and Proposed Uses

If additional space is required, submit an attachment with the information required.

SEALED SOURCES

Manufacturer or Distributor and Model of the Device	Quantity Requested	Radionuclide and Activity Per Source	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
			<input type="checkbox"/> Yes, Uses are as follows: _____	<input type="checkbox"/> Not Applicable OR <input type="checkbox"/> Uses are as follows: _____ AND <input type="checkbox"/> Safety analysis is attached
			<input type="checkbox"/> Yes, Uses are as follows: _____	<input type="checkbox"/> Not Applicable OR <input type="checkbox"/> Uses are as follows: _____ AND <input type="checkbox"/> Safety analysis is attached

OTHER RADIOACTIVE MATERIALS

Radionuclide	Chemical/Physical Form	Maximum Activity per Source	Maximum Possession Limit	Specify Uses:

Item 5.2 Financial Assurance

Financial assurance requirements occasionally apply to fixed gauge sources. Applicants should refer to 32 Ill. Adm. Code 326.50 to review exempt criteria. If applicable, the applicant must satisfy 32 Ill. Adm. Code 326.

NEW APPLICANT (Check one)

- ☐ Exempt ☐ \$25,000 instrument will be provided prior to issuance of license ☐ Reclamation plan/cost estimate attached

RENEWAL OR AMENDMENT (Check one)

- ☐ Exempt ☐ Existing document reviewed – no changes necessary ☐ Limiting condition applies
☐ Updated reclamation plan/cost estimate attached

Item 7. Individual(s) Responsible for Radiation Safety Program and Their Training and Experience**Item 7.1 Radiation Safety Officer (RSO)**

Full Name:	Title:
Address:	Email:
City, State, Zip:	Phone:

The proposed RSO is:

- ☐ A full-time employee of the licensee **OR** Position and/or Relationship is as follows:
- ☐ Attached is evidence of RSO Training and Experience
- IF APPLICABLE:**
- ☐ Evidence of the completion of "non-routine" maintenance training is attached for Agency review.
- ☐ The RSO will be performing "HAZMAT functions" as described in 49 CFR Part 171. Evidence of training relative to these duties is attached for Agency review.
- ☐ Duties and responsibilities of the RSO are attached for Agency review.
- ☐ Delegation of Authority Statement signed by both management and the RSO is attached.
(A model form is available on the Agency website)
- ☐ We request authorization for the RSO to delegate duties

Item 7.2 Authorized Users (AU) (The applicant should refer to the specific NUREG)

- ☐ The name of each proposed AU with the types and quantities of licensed material to be used is attached.
- ☐ Information demonstrating that each proposed AU is qualified by training and experience to use the requested licensed materials is attached.
- ADDITIONALLY, CHECK ALL THAT APPLY:**
- ☐ Authorized Users will perform "non-routine" operations such as installation, repair, maintenance, removal from service, or any activity impacting the radiological safety of a sealed source and/or device. A description of the additional training to be provided relative to these duties is attached for Agency review.
- NOTE:** See Item 10.8 to address additional operational procedures and requirements
- ☐ Authorized Users will be performing "HAZMAT functions" as described in 49 CFR Part 171. Both initial and refresher DOT HAZMAT training will be provided to applicable personnel as required in 32 Ill. Adm. Code 341.10(b)(7).
- ☐ The applicant is subject to 32 Ill. Adm. Code Part 337. Both initial and annual refresher training will be provided to applicable personnel as required in 32 Ill. Adm. Code 337.2020(c).

If the proposed RSO or AU is unknown to the Agency (not listed on any license previously), complete the *Release and Authorization Full Due Diligence Form* to expedite processing of the application.

[IEMA Consent for Background Check \(illinois.gov\)](http://illinois.gov)

Item 8. Training for Individuals Working in or Frequenting Restricted Areas

- ☐ Attached is a description of the radiation safety training program, including topics covered, to whom it will be provided, manner in which the training will be assessed, qualifications of instructors, and the method and frequency of training.

Item 9. Facilities and Equipment

- ☐ Diagrams of radioactive material use and storage areas are attached showing the locations of shielding, the proximity of radiation sources to unrestricted areas, areas containing flammable or hazardous materials; and other items related to radiation safety.

AND

- ☐ A Description of use areas (e.g., receipt, storage, security, preparation, measurement, use, waste) and equipment necessary to provide sufficient engineering controls and barriers to protect the health and safety of the public and radiation workers is attached.

IF APPLICABLE:

- ☐ Diagrams contain schematic descriptions of the ventilation systems, with pertinent airflow rates, pressures, filtration equipment, and monitoring systems.

Item 10. Radiation Safety Program

Item 10.1 Audit Program (Mark one)

- ☐ We will use the template annual audit provided in Appendix ____ of NUREG 1556 Vol. ____, Rev. ____.

OR

- ☐ We will use an alternative audit program.

Item 10.2 Radiation Monitoring Instruments

- ☐ Describe the instrumentation that will be used to perform required surveys.

AND, SELECT ONE OF THE FOLLOWING THREE CHOICES:

- ☐ Each radiation survey meter will be calibrated by the manufacturer or other person authorized by IEMA-OHS, the U.S. NRC, or an Agreement State to perform radiation survey meter calibrations.

OR

- ☐ We will implement the model radiation survey instrument calibration program in Appendix ____, in NUREG-1556, Volume ____, Rev. ____.

OR

- ☐ Alternative calibration procedures are attached for IEMA-OHS review.

OR, IN LIEU OF THE ABOVE:

- ☐ Attached is an alternative method to perform required radiation surveys according to 32 Ill. Adm. Code 340.510.

Item 10.3 Material Receipt and Accountability

- ☐ We will develop, implement, and maintain procedures for ensuring accountability of licensed materials at all times.

AND

- ☐ Physical inventories will be conducted every 6 months in accordance with 32 Ill. Adm. Code 340.810.

IF APPLICABLE:

- ☐ We will comply with the National Source Tracking System (NSTS) reporting requirement as described in 32 Illinois Adm. Code 330.950.

Item 10.4 Occupational Dose (Mark one)

- ☐ We have attached documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 32 Ill. Adm. Code 340.520(a).

OR

- ☐ We will provide and require the use of individual monitoring devices (dosimetry) of the type and frequency specified in the table below. All personnel dosimeters that require processing to determine the radiation dose will be processed and evaluated by a NVLAP-approved processor.

Type	Exchange Frequency	OSL	TLD	Self-reading or electronic personal dosimeters
Whole body		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Manufacturer/Model:
Extremity		<input type="checkbox"/>	<input type="checkbox"/>	

Item 10.5 Public Dose

- ☐ Public dose calculations demonstrating members of the public will not receive more than 1 millisievert (1 mSv) [100 millirem (100 mrem)] in one year, and the dose in any unrestricted area will not exceed 0.02 mSv (2 mrem) in any one hour, from licensed operations are attached.

Item 10.6 Operating, Emergency, and Security Procedures (Mark one)

- ☐ We will use the template operating, emergency, and security procedures provided in Appendix ____ of NUREG-1556, Volume ____, Rev. ____.

OR

- ☐ Attached are alternative operating, emergency and security procedures for IEMA-OHS review.

Item 10.7 Surveys and Leak Tests (Mark all that apply)

- ☐ A description of the radiation survey program, including survey frequencies and contamination levels, to evaluate a radiological hazard is attached.

AND

- ☐ Leak tests of sealed sources will be performed in accordance with 32 Ill. Adm. Code 340.410. Leak tests will be performed by an organization licensed by IEMA-OHS, the U.S. NRC, or an Agreement State to provide leak testing services to other licensees; or by using a leak test sample collection kit supplied by an organization licensed by IEMA-OHS, the U.S. NRC, or an Agreement State to provide leak test kits and/or sample analysis services to other licensees and according to the kit supplier's instructions. Records of leak test results will be maintained in accordance with 32 Ill. Adm. Code 340.1135.

OR

- ☐ We will implement the model leak test program in Appendix ____ of NUREG-1556, Volume ____, Rev. ____,. Records of leak tests will be maintained in accordance with 32 Ill. Adm. Code 340.1135.

OR

- ☐ A description of alternative equipment and/or procedures for determining whether there is any radioactive leakage from sealed sources are attached. Records of leak tests will be maintained in accordance with 32 Ill. Adm. Code 340.1135.

Item 10.8 Maintenance

☐ N/A

For routine maintenance:

- ☐ We will implement and maintain procedures for routine maintenance of our devices according to each manufacturer or distributor's written recommendations and instructions.

OR

- ☐ Alternative procedures are attached for IEMA-OHS review.

For nonroutine maintenance: (Non-routine maintenance may include, but is not limited to: installation, initial radiation survey, repair and maintenance of radiological safety components, relocation, replacement, alignment, removal from service, and disposal of sealed sources.)

- ☐ The device manufacturer, distributor, or other person specifically licensed by IEMA-OHS, the U.S. NRC, or an Agreement State will perform nonroutine maintenance.

OR

- ☐ We have attached a request to perform this work "in-house" which includes a description of the activities, identification of AUs, and steps necessary to control exposures ALARA. Procedures consistent with the manufacturer or distributor's instructions and recommendations are attached for Agency review.

Item 10.9 Transportation

No response is required from the applicant as part of the license application. When applicable, HAZMAT training required by 49 CFR 172, Subpart H must be completed by all employees performing HAZMAT functions within 90 days after employment or change in job duties, prior to performing HAZMAT functions and every three years thereafter.

Item 10.10 Temporary Job Sites

- ☐ We will not use radioactive materials at temporary jobsites.

OR

- ☐ We request to use radioactive materials at temporary jobsites (≤ 180 days during any consecutive twelve-month period) and have attached operating, emergency, security, and lock-out (if applicable) procedures. Copies of these procedures will be provided to authorized users and will be available at all temporary jobsites.

Item 10.11 Security Program for Category 1 and Category 2 Radioactive Material

- ☐ We will establish, implement, and maintain a security program to ensure the physical protection of radioactive material in accordance with the requirement in 32 Ill. Adm. Code Part 337. NOTE: Do **NOT** submit security or access authorization procedures to the Agency.

OR

- ☐ Not applicable. We will provide written notification to IEMA-OHS at least 90 days before aggregating radioactive material to a quantity that equals or exceeds the Category 2 threshold.

Item 11. Waste Management – Waste Disposal and Transfer

We will transfer or dispose of radioactive materials as follows:

- ☐ Transfer of licensed material as described in 32 Ill. Adm. Code 340.1010(a)(1). The licensee will obtain a copy of the transferee's license and verify their authorization to possess prior to transfer.
- ☐ We request authorization to receive waste containing licensed material from any other point of generation for storage, treatment or disposal as described in 32 Ill. Adm. Code 340.1010(b).
- ☐ Disposal of liquids into sanitary sewerage in accordance with 32 Ill. Adm. Code 340.1030.
- ☐ Treatment or disposal by incineration in accordance with 32 Ill. Adm. Code 340.1040. A description and procedures for proposed activities requested for Agency approval are attached.
- ☐ Decay-In-Storage in accordance with 32 Ill. Adm. Code 340.1045.
- ☐ Disposal of H-3, C-14 or I-125 in accordance with 32 Ill. Adm. Code 340.1050.
- ☐ Disposal method not otherwise authorized in 32 Ill. Adm. Code: Chapter II, Subchapters b and d. Proposed procedures, addressing the requirements in 32 Ill. Adm. Code 340.1020, are attached for Agency review.

AND

- ☐ We will use the model waste procedures published in Appendix ____ in NUREG-1556, Volume __, Rev. __.

OR

- ☐ Attached are alternative waste disposal and transfer procedures for Agency review.

Item 12. License Fees (Refer to 32 Ill. Adm. Code 331)

- ☐ Not Applicable (Agency of a State, County or Municipal Government or an Educational Institution as defined in 32 Ill. Adm. Code 331.110)

Do not submit your fee payment. New applicants will be billed a prorated fee for the portion of the billing year remaining from the date the application is received. Licensees adding sites or changing fee categories will be billed a prorated amount when the license is amended. Existing licensees and applicants are also subject to annual bills as specified in 32 Ill. Adm. Code 331.

Fee Category: _____ (See Appendix E of 32 Ill. Adm. Code Part 331 for fee categories)

ITEM 13. Certification:

Every applicant must complete Section A:

- A: I have reviewed the above items and hereby certify that my radiation protection program meets the current 32 Ill. Adm. Code, radioactive materials license with active amendments, operating procedures and ALARA Program, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of my knowledge and belief.

Signature: _____ Date: _____

Title: _____ Applicant's FEIN: _____

Complete Section B *only* if the applicant is an individual:

- B. If you are applying as an individual, rather than as a corporation or other legal entity, you must provide the following information in order to process your application:

Have you defaulted on an educational loan guaranteed by the Illinois Student Assistance Commission?

☐ Yes ☐ No

I certify, under penalty of perjury, that I am not more than 30 days delinquent in complying with a child support order. Failure to certify may result in a denial of the license and making a false statement may subject you to contempt of court. (5 ILCS 100/10-65)

I declare that all information either included with or appearing on this application is accurate and true to the best of my knowledge.

Signature: _____ Social Security Number: _____

Title: _____ Date: _____

If the applicant is an individual and is unknown to the Agency (not listed on any license previously), complete the *Release and Authorization Full Due Diligence Form* to expedite processing of the application.

[IEMA Consent for Background Check \(illinois.gov\)](http://IEMA.Consent.for.Background.Check(illinois.gov))