U.S. NUCLEAR REGULATORY COMMISSION

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REGULATORY GUIDE

OFFICE OF STANDARDS DEVELOPMENT

REGULATORY GUIDE 10.7

GUIDE FOR THE PREPARATION OF APPLICATIONS FOR LICENSES FOR LABORATORY AND INDUSTRIAL USE OF SMALL QUANTITIES OF BYPRODUCT MATERIAL

1. INTRODUCTION

This guide describes the type of information needed by the NRC staff to evaluate an application for a specific license for laboratories and industries using millicurie quantities of byproduct material (reactor-produced radionuclides). This type of license is provided for under Title 10, Code of Federal Regulations, Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material."

Paragraph 20.1(c) of 10 CFR Part 20, "Standards for Protection Against Radiation," states that "...persons engaged in activities under licenses issued by the Nuclear Regulatory Commission pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974 should, in addition to complying with the requirements set forth in this part, make every reasonable effort to maintain radiation exposures, and releases of radioactive materials in effluents to unrestricted areas, as low as is reasonably achievable" (ALARA). Regulatory Guide 8.10, "Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Is Reasonably Achievable," provides the NRC staff position on this important subject. License applicants should give consideration to the ALARA philosophy, as described in Regulatory Guide 8.10, in the development of plans for work with licensed radioactive materials.

2. LICENSE FEES

An application fee is required for most types of licenses. The applicant should refer to §170.31, "Schedule of Fees for Materials Licenses and Other Regulatory Services," of 10 CFR Part 170 to determine the amount of fee that must accompany the application. Review of the application will not begin until the proper fee is received by the NRC.

3. FILING AN APPLICATION

An applicant for a byproduct material (radioisotopes) license should complete Form NRC-313I (see the appendix to this guide).[1] All items on the application form should be completed in sufficient detail for the NRC to determine that the applicant's equipment, facilities, and radiation protection program are adequate to protect health and minimize danger to life and property.

Since the space provided on Form NRC-313I is limited, the applicant should append additional sheets to provide complete information. Each separate sheet or document submitted with the application should be identified by a heading indicating the appropriate item number (on Form NRC-313I) and its purpose (e.g., radiation safety instructions).

The application should be completed in triplicate. The original and one copy should be mailed to the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. One copy of the application, with all attachments, should be retained by the applicant since the license will require, as a condition, that the institution follow the statements and representations set forth in the application and any supplement to it.

*Lines indicate substantive changes from previous issue.

[1] Applications for medical uses should be submitted on Form NRC-313M, and applications for use of sealed sources in radiography should be submitted on Form NRC-313R.

4. CONTENTS OF AN APPLICATION

Most items of Form NRC-313[1] are self-explanatory (see instructions with the form). The following comments apply to the indicated numbered items of the form.

Items 2 and 4. Specify the applicant corporation or other legal entity by name and address of principal office. Individuals should be designated as the applicant only if the use of the byproduct material is not connected with the individual's employment with a corporation or other entity. If the applicant is an individual, the individual should be specified by full name and address, including state and zip code.

Item 5. Specify the street address of the location of use if the address differs from the one given in Item 4. If use is to be at more than one location, the specific address of each should be given. Describe the extent of use and the facilities and equipment at each location. A post office box address is not acceptable.

Item 6. Specify the names of the persons who will directly supervise the use of radioactive material or who will use radioactive material without supervision.

Item 7. Specify the name of the person who will be designated as the radiation protection officer.[2] This person should be responsible for implementing the radiation safety program and therefore readily available to the users in case of difficulty and should be trained and experienced in radiation protection and in the use and handling of radioactive materials. In a small program not requiring a full-time radiation protection officer, the duties of the radiation protection officer may be assigned to one of the persons named under Item 6 of Form NRC-313. Note, however, that it must be established that the person acting as radiation protection officer will have the opportunity to devote sufficient time to the radiation safety aspects of the program for the use of radioactive materials.

Items 8A, B, C, and D. Describe the byproduct material by isotope, chemical and/or physical form, and activity, in millicuries or microcuries. A separate possession limit for each nuclide should be specified. Possession limits requested should cover the total anticipated inventory, including stored materials and waste, and should be commensurate with the applicant's needs and facilities for safe handling.

If the use of sealed or plated sources is contemplated, the isotope, manufacturer, and model number of each sealed or plated source should be specified. If a source will be used in a gas chromatograph, gauge, or other device, the manufacturer and model number of the device should be specified.

Item 8E and Item 9. The use to be made of the radioactive materials should be clearly described. Sufficient detail should be given to allow a determination of the potential for exposure to radiation and radioactive materials both of those working with the materials and of the public.

Items 10 and 11. Specify for each radiation detection instrument the manufacturer's name and model number, the number of each type of instrument available, the type of radiation detected (alpha, beta, gamma, or neutron), the sensitivity range (milliroentgens per hour or counts per minute), the window thickness in mg/cm^2, and the type of use. The type of use would normally be monitoring, surveying, assaying, or measuring.

Describe the instrument calibration procedure. State the frequency, and describe the methods and procedures for the calibration of survey and monitoring instruments, as well as any other instruments and systems used in the radiation protection program, such as measuring instruments used to assay sealed-source leak-test samples (see Item 15), contamination samples (e.g., air samples, surface "wipe" samples), and bioassay samples (see Item 12).

An adequate calibration of survey instruments usually cannot be performed with built-in check sources. Electronic calibrations that do not involve a source of radiation are also not adequate to determine the proper functioning and response of all components of an instrument.

Daily or other frequent checks of survey instruments should be supplemented every 6 months with a two-point calibration on each scale of each instrument with the two points separated by at least 50% of the scale. Survey instruments should also be calibrated following repair. A survey instrument may be considered properly calibrated when the instrument readings are within ±10 percent of the calculated or known values for each point checked. Readings within ±20 percent are considered acceptable if a calibration chart or graph is prepared and attached to the instrument.

If the applicant proposes to calibrate his survey instruments, a detailed description of planned calibration procedures should be submitted. The description of calibration procedures should include, as a minimum:

a. The manufacturer and model number of each radiation source to be used,

[1] The terms "radiation protection officer" and "radiological safety officer" are synonymous.

b. The nuclide and quantity of radioactive material contained in each source,

c. The accuracy of the source(s). The traceability of the source to a primary standard should be provided.

d. The step-by-step procedures, including associated radiation safety procedures, and

e. The name and pertinent experience of each person who will perform the calibrations.

If the applicant intends to contract out the calibration of instruments, the name, address, and license number of the firm should be specified together with the frequency of calibration. The applicant should contact the firm that will perform the calibrations to determine if information concerning calibration procedures has been filed with the Commission. If information concerning calibration procedures has not been filed, it should be obtained and submitted.

Quantitative measuring instruments used to monitor the adequacy of containment and contamination control such as those used for measuring leak test, air, effluent, bioassay, work area, and equipment contamination samples should usually be calibrated prior to each use. The procedures and frequency for calibration of such instruments should be submitted and should include:

a. The name of the manufacturer and model number of each of the standards to be used,

b. The nuclide and quantity of radioactive material contained in each of the standard sources,

c. A statement of the accuracy of each of the standard sources. The source accuracy should be, as a minimum, ±5 percent of the stated value and traceable to a primary standard, such as that maintained by the National Bureau of Standards.

d. Step-by-step calibration procedures and, if appropriate, associated radiation safety procedures, and

e. The name and pertinent experience of each person who will perform the instrument calibrations.

Item 12. Personnel monitoring is required to ensure compliance with §§20.101 and 20.202 of 10 CFR Part 20. Personnel monitoring is also required if a person enters a high radiation area (greater than 100 millirems per hour). If personnel monitoring equipment will be used, the name of the organization furnishing film badge or thermoluminescent dosimeter (TLD) service and the frequency for changing badges, dosimeters, etc., should be specified. If pocket chambers or pocket dosimeters will be used, the useful range of the device, in milliroentgens, the frequency of reading, and the procedures for maintaining and calibrating the devices should be specified.

If personnel monitoring will not be used, the applicant should submit calculations or documentation from radiation surveys demonstrating that it is unlikely that any individual will receive a dose equal to or greater than that indicated in 10 CFR Part 20.

The applicant should show that the need for bioassays has been thoroughly considered and should establish the adequacy of the proposed bioassay program in relation to the proposed program of use of radioactive material. Bioassays are normally required when individuals work with millicurie quantities of hydrogen-3, iodine-125, or iodine-131 depending on the type of work, equipment, and procedures followed. Regulatory Guide 8.20, "Applications of Bioassay for I-125 and I-131," and a document entitled "Guidelines for Bioassay Requirements for Tritium"[3] may be consulted. Other materials may also be used in physical or chemical forms and under conditions that present an opportunity for uptake by the body through ingestion, inhalation, or absorption. A bioassay program to determine and control the uptake of radioactive material should be considered and discussed in relation to each such material, procedure, etc. Regulatory Guide 8.9, "Acceptable Concepts, Models, Equations, and Assumptions for a Bioassay Program," may be consulted.

The criteria to be used in determining the need for bioassays, the type and frequency of bioassays that will be performed, and the bioassay procedures should be specified and described in detail. If a commercial bioassay service is to be used, the name and address of the firm should be provided.

Bioassays may not be substituted for other elements of a safety program such as air monitoring and dispersion control (hoods, glove boxes, etc.) and for well-thought-out and well-executed handling procedures.

Item 13. The facilities and equipment for each site of use should be described in detail. The proposed facilities and equipment for each operation to be conducted should be adequate to protect health and minimize danger to life and property. In describing available facilities and equipment, the following should be included, as appropriate:

a. Physical plant, laboratory, or working area facilities. Fume hoods, glove boxes, waste receptacles, special sinks, ventilation and containment systems, effluent filter systems, and

[3] A copy may be obtained by a written request to the U.S. Nuclear Regulatory Commission, Office of Nuclear Material Safety and Safeguards, Division of Fuel Cycle and Material Safety, Washington, D.C. 20555, Attention: Director, Office of Nuclear Material Safety and Safeguards.

all processing work and protective clothing change areas should be described

A drawing or sketch should be submitted showing the location of all such equipment and the relationship of areas where radioactive materials will be handled to unrestricted areas where radioactive materials will not be handled. In those programs where radioactive material may become airborne or may be included in airborne effluents, the drawing or sketch should also include a schematic description of the ventilation system annotated to show airflow rates, differential pressures, filtration and other effluent treatment equipment and air and effluent monitoring instruments. Drawings or sketches should be drawn to a specified scale, or dimensions should be included on each drawing or sketch. Each drawing or sketch should be labeled to specify the location of the facilities and equipment depicted with respect to the address(es) given in Item 5 of Form NRC-313I

b. Containers, devices, protective clothing, auxiliary shielding, general laboratory equipment, air sampling equipment, etc., actually employed in the daily use of material. Special provisions for shielding and containment to minimize personnel exposure should be described. Storage containers and facilities should provide both shielding and security for materials.

c. The number, type, and length of remote handling devices.

d. If respiratory protective equipment will be used to limit the inhalation of airborne radioactive material, the provisions of §20.103 of 10 CFR Part 20 should be followed and appropriate information should be submitted.

Item 14. The procedures for disposing of byproduct material waste should be described. Under NRC regulations, a licensee may dispose of waste in the following ways.

a. Transfer to a person properly licensed to receive such waste in conformance with paragraph 20.301(a) of 10 CFR Part 20. The name of the firm (which should be contacted in advance to determine any limitations that the firm may have on acceptance of waste) should be given.

b. Release into a sanitary sewer in conformance with §20.303 of 10 CFR Part 20. Depending on water usage, releases of up to 1 curie per year are permitted.

c. Burial in soil in conformance with §20.304 of 10 CFR Part 20. Up to 12 burials per year are permissible. The allowable quantity depends upon the radionuclide.[4]

d. Release into air or water in concentrations in conformance with §20.106 of 10 CFR Part 20. Possible exposure to persons offsite limits the amount that may be released.

e. Treatment or disposal by incineration in conformance with §20.305 of 10 CFR Part 20. This must be specifically approved by the Commission.

f. Other methods specifically approved by the Commission pursuant to §20.302 of 10 CFR Part 20.

Item 15

a. Survey Program. Commission regulations require that surveys be made to determine if radiation hazards exist in a facility in which radioactive materials are used or stored (see §20.201 of 10 CFR Part 20). A survey should include the evaluation of external exposure to personnel, concentrations of airborne radioactive material in the facility, and radioactive effluents from the facility. Although a theoretical calculation is often used to demonstrate compliance with regulations regarding airborne or external radiation, it cannot always be used in lieu of a physical survey.

Except for those cases where sources of radiation and radioactive material are well known and accurately and precisely controlled, it will usually be necessary that a physical survey be made with appropriate detection and measurement instruments to determine the nature and extent of radiation and radioactive material or, as a minimum, confirm the results of a theoretical determination.

A radiation protection program should include the following surveys for radioactive contamination and radiation.

(1) In laboratory or plant areas (e.g., checking for contamination on bench tops, handling and storage equipment, clothing, hands).

(2) While work is being done with radiation or radioactive materials (e.g., breathing zone air surveys, general air surveys, personnel exposure measurements, including eyes and extremities; checking shutters and containment).

(3) In areas associated with disposal or release of radioactive materials (e.g., checking

[4]The NRC has proposed an amendment that would delete §20.304 of 10 CFR Part 20 (43 FR 56677, December 4, 1978). If this amendment is adopted, all burials of radionuclides in accordance with §20.304 of 10 CFR Part 20 will require NRC approval.

disposal containers and disposal sites; liquid, gas, and solid effluents, filters and filter-duct systems)

The frequency of surveys will depend on the nature of the radioactive materials and their use. However, surveys should be performed prior to the use of radioactive materials in order to establish a baseline. The surveys should be repeated when radioactive materials are present, when the quantity or type of material present changes, or when changes occur in their containment systems or methods of use. Repetitive surveys may also be necessary to control the location of radioactive materials in the handling system and in the case of the use of sealed sources outside a shielded container.

For operations involving materials in gas, liquid, or finely divided forms, the survey program should be designed to monitor the adequacy of containment and control of the materials involved. The program should include air sampling, monitoring of effluents, and surveys to evaluate contamination of personnel, facilities, and equipment. Physical effluent measurements are essential to determine compliance with Appendix B to 10 CFR Part 20.

The description of an air sampling program should include the area where samples will be taken, the frequency of sampling, and the location of the sampler with respect to workers' breathing zones. Assays performed to evaluate air samples and the methods used to relate results to actual personnel exposures should also be described.

The effluent monitoring program for releases to unrestricted areas should encompass all airborne and liquid radioactive material releases. Theoretical evaluations should be supplemented by stack monitoring, water sampling, and other environmental monitoring appropriate for the planned and potential releases.

For operations involving only sealed sources, a survey program should include evaluation and/or measurement of radiation levels for storage and use configurations. When sources are used in devices having "on" and "off" positions, both positions should be evaluated at the time of installation. Supplemental surveys should be performed following any changes in operation, shielding, or use.

The types, methods, and frequency of surveys should be described in the application. Guidance may be obtained from the National Council on Radiation Protection Report No. 10, "Radiological Monitoring Methods and Instruments,"[5] and the International Atomic Energy Agency's Technical Report Series No. 120, "Monitoring of Radioactive Contamination on Surfaces."[6]

b. Records Management Program. Provision for keeping and reviewing records of surveys; materials inventories; personnel exposures; receipt, use, and disposal of materials, etc., should be described. Persons responsible for keeping and reviewing records should be identified.

c. Sealed-Source Leak-Test Procedures. Sealed sources containing more than 100 microcuries of a beta or gamma emitter or more than 10 microcuries of an alpha emitter must be leak tested at 6-month intervals. Leak testing of alpha-particle-emitting sources containing more than 10 microcuries of an alpha emitter is required at 3-month intervals. If a commercial firm is to perform the leak tests, the name, address, and license number of the firm should be submitted. If the tests are to be performed using a commercial "kit," the name of the kit manufacturer or distributor and the kit model designation should be given. If the applicant intends to perform his own leak tests without the use of a commercial kit, the following information should be submitted:

(1) Qualifications of personnel who will perform the leak test.

(2) Procedures and materials to be used in taking test samples,

(3) The type, manufacturer's name, model number, and radiation detection and measurement characteristics of the instrument to be used for assay of test samples,

(4) Instrument calibration procedures, including calibration source characteristics, make, and model number, and

(5) The method, including a sample calculation, to be used to convert instrument readings to units of activity, e.g., microcuries.

d. Instructions to Personnel. If a number of individuals will use radioactive materials under the supervision of one or more of those persons named in Item 6 of Form NRC-313I, written instructions should be prepared and submitted with the license application in the form in which they will be distributed to those working with radioactive materials. These instructions should cover, but not necessarily be limited to:

(1) The availability, selection, and use of laboratory apparel and safety-related equipment and devices (e.g., laboratory coats, gloves, and remote pipetting devices).

[5]Copies may be obtained from NCRP Publications, P.O. Box 4867, Washington, D.C. 20008.

[6]Copies may be obtained from UNIPUB, Inc., P.O. Box 433, New York, N.Y. 10016.

(2) Limitations and conditions to be met in handling liquid or uncontained (unencapsulated, dispersible, or volatile) radioactive materials and special laboratory equipment to be used in working with these types of materials. For example, the instructions should explain when operations with materials should be confined to a radiochemical fume hood or glove box and should specify the use of appropriate shielding and remote handling equipment when energetic beta- or gamma-emitting materials are to be used.

(3) The performance of radiation survey and monitoring procedures for each area in which radioactive materials are to be used.

(4) Safety precautions to be observed in the movement of radioactive materials between buildings, rooms, and areas within rooms.

(5) Safety requirements for storage of radioactive materials, including labeling of containers of radioactive materials and posting and securing areas where radioactive materials are to be stored. This should include the storage of contaminated laboratory equipment such as glassware.

(6) Requirements for posting of areas in which radioactive materials are used.

(7) The availability and use of personnel monitoring devices, including the recording of radiation exposures and the procedures to be followed for the processing of personnel monitoring devices such as thermoluminescent dosimeters and film badges in order to obtain personnel monitoring results.

(8) Waste disposal procedures to be followed, including limitations on the disposal of liquid or other dispersible waste to the sanitary sewer and procedures for the collection, storage, and disposal of other wastes

(9) The maintenance of appropriate records as required by 10 CFR Part 20 and 10 CFR Part 30.

(10) The requirements for and the method of performing or having appropriate sealed-source leak tests performed.

(11) Good radiation safety practices, including the control of contamination, specification of acceptable removable and fixed contamination levels for both restricted and unrestricted areas, prohibition of smoking and the consumption of food or beverages in areas where radioactive materials may be used, and prohibition of the frequent transfer of potentially contaminated equipment between potentially contaminated areas and unrestricted areas.

(12) The use of radioactive materials in animals. If radioactive materials will be used in animals, instructions concerning such use should be prepared and submitted with the license application. Such instructions should include (a) specification of the facilities to be used to house the animals, (b) instructions to be provided to animal caretakers for handling animals, animal wastes, and carcasses, (c) instructions to appropriate personnel for cleaning and decontaminating animal cages, and (d) methods to be used to ensure that animal rooms will be locked or otherwise secured unless attended by authorized users of radioactive materials. A description of animal handling and housing facilities should be included under Item 13 of Form NRC-313I.

(13) Emergency procedures. These instructions should be addressed to all persons in all laboratory or facility areas where radioactive materials will be used and should cover actions to be taken in case of such accidents involving radioactive materials as spills, fires, release or loss of material, or accidental contamination of personnel. Specifically, these instructions should (a) specify immediate actions to be taken in order to prevent or limit the contamination of personnel and areas, e.g., the shutting down of ventilation equipment, evacuation of contaminated and potentially contaminated areas, containment of any spills of radioactive material, (b) give the telephone numbers of individuals to be notified in case of emergency, and (c) instruct personnel in proper entry, decontamination, and recovery operations for contaminated facilities. (Note: Only properly trained individuals should attempt decontamination and recovery operations.)

(14) Requirements and procedures for picking up, receiving, and opening packages (see §20.205 of 10 CFR Part 20).

Items 16 and 17. A resumé of the training and experience of each person who will directly supervise the use of material, who will use material without supervision, or who will have responsibilities for radiological safety should be submitted. The resumé should include the type (on-the-job or formal course work), location, and duration of the training. Training should cover (a) principles and practices of radiation protection, (b) radioactivity measurements, standardization, and monitoring techniques and instruments, (c) mathematics and calculations basic to the use and measurement of radioactivity, and (d) biological effects of radiation. The description of the use of radioactive materials should include the specific isotopes handled, the maximum quantities of materials handled, where the experience was gained, the duration of experience, and the type of use. The qualifications, training, and

experience of each person should be commensurate with the material and its use as proposed in the application. The amount and type of training and experience with radiation and radioactive materials required to support a determination of adequacy by the Commission will vary markedly with certain factors.

If other persons such as technical assistants and laboratory workers will use radioactive materials in the absence of persons specified above, the specification of the training of such personnel should include (a) instruction in radiation safety, including topics covered and by whom taught, (b) on-the-job training in use of radioactive materials, and (c) determination of competency to work without the presence of supervisory personnel.

The use of microcurie quantities of a few nonvolatile radioactive materials by a person with a minimum of training and experience under precisely specified and carefully controlled conditions subject to the surveillance of a competent and adequately trained radiation protection officer may be justified. Such minimum training and experience may consist of a few hours of training and experience in the use of one or more radioactive materials similar to the use proposed in the application under the supervision and tutorship of a licensed user.

Persons using millicurie quantities of a number of radionuclides for general laboratory tracer work under unspecified conditions should have more extensive training and experience and, depending on the exact nature of the proposed program of use of radionuclides, may need to have completed formal course work at the college or university level covering the areas listed under Item 16 of Form NRC-313I.

The use of larger quantities of material (approaching a curie) under conditions where a potential exists for significant loss and ingestion, inhalation, or absorption of the radioactive material by those working with the material is normally done under carefully controlled conditions using specialized equipment. A person who is to use radioactive materials independently under these conditions should not only have a background of formal training in all areas described in Item 16 of Form NRC-313I but should also have extensive experience working with radioactive material and a thorough working knowledge of the equipment required to handle the material safely.

5. AMENDMENTS TO LICENSES

Licensees are required to conduct their programs in accordance with statements, representations, and procedures contained in the license application and supportive documents. The license must therefore be amended if the licensee plans to make any changes in facilities, equipment (including monitoring and survey instruments), procedures, personnel, or byproduct material to be used.

Applications for license amendments may be filed either on the application form or in letter form. The application should identify the license by number and should clearly describe the exact nature of the changes, additions, or deletions. References to previously submitted information and documents should be clear and specific and should identify the pertinent information by date, page, and paragraph.

6. RENEWAL OF A LICENSE

An application for renewal of a license should be filed at least 30 days prior to the expiration date. This will ensure that the license does not expire until final action on the application has been taken by the NRC as provided for in paragraph 30.37(b) of 10 CFR Part 30.

Renewal applications should be filed on Form NRC-313I, appropriately supplemented, and should contain complete and up-to-date information about the applicant's current program.

In order to facilitate the review process, the application for renewal should be submitted without reference to previously submitted documents and information. If such references cannot be avoided, they should be clear and specific and should identify the pertinent information by date, page, and paragraph.

APPENDIX A

Form NRC-313 (I)
(1/79)
10 CFR 30

U.S. NUCLEAR REGULATORY COMMISSION

Form Approved by GAO
B-180225(RO579)

INSTRUCTIONS FOR PREPARATION OF APPLICATION FOR BYPRODUCT MATERIAL LICENSE

FORM NRC-313 (I)

GENERAL INFORMATION

An applicant for a "Byproduct Material (Radioisotopes) License," should complete Form NRC-313 (I) in detail and submit in duplicate to the U.S. Nuclear Regulatory Commission. The applicant should endeavor to cover his entire radioistope program with one application, if possible. However, separate applications should be submitted for gamma irradiators. Applications for medical uses should be submitted on Form NRC-313 (M) and applications for use of sealed sources in radiography should be submitted on Form NRC-313R. Supplemental sheets may be appened when necessary to provide complete information. *Item 18 must be completed on all applications. Submission of an incomplete application will often result in a delay in issuance of the license because of the correspondence necessary to obtain information requested on the application*

NOTE: When the application includes one of the special uses listed below the applicant should request the appropriate pamphlet which provides additional instructions

1. Industrial Radiography "Licensing Requirements for Industrial Radiography" (use application Form NRC-313R for Radiography);
2. Laboratory and Industrial Uses of Small Quantities "Guide for Preparation of Applications for Laboratory and Industrial Uses of Small Quantities of Byproduct Material."
3. Broad License (research and development)–"Licensing Guide for Type-A Licenses of Broad Scope for Research and Development."
4. Licensing Guides for the performance of well logging operations.
5. Licensing guide for the use of sealed sources in portable and semiportable gauging devices'

The Commission charges fees for filing of applications for licenses as specified in Section 170.12, Title 10 Code of Federal Regulations, Part 170. The applicant should refer to Section 170.31, *Schedule of fees for materials licenses*, to determine what fee should accompany the application. No action can be taken on applications until fees are paid. Checks or money orders should be made payable to the U.S. Nuclear Regulatory Commission.

Two copies of the completed Form NRC-313 (I) and two copies of each attachment thereto should be sent to the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission Washington, D.C. 20555. One copy should be retained for the applicant's file. Applications may also be filed in person at the Commission's office at 1717 H Street, N.W., Washington, D.C. or at 7915 Eastern Avenue, Silver Spring, Maryland

EXPLANATION OF FORM NRC-313 (I)

Form NRC-313 (I) is designed for use in supplying information on programs of varying complexity. The applicant should provide complete information on his proposed program for the possession and use of licensed material. For those items that do not apply, indicate as N.A. (not applicable)

Item No.

1. Self-explanatory
2. The "applicant" is the organization or persons legally responsible for possession and use of the licensed materials specified in the application.
3. Self-explanatory
4. Self-explanatory
5. The actual sites of use should be listed as indicated. Permanent facilities such as field offices for portable gauges or devices should be identified in Item 5 by Street, Address, City and State. Temporary field locations of use should be specified as "temporary job sites of the applicant" and list the States throughout which the temporary job sites will be located. Attach additional properly keyed sheet if more space is needed.
6. Self-explanatory
7. The "Radiation Protection Officer" is the named individual who is expected to coordinate the safe use of the licensed material specified in the application and who will ensure compliance with the applicable parts of Title 10, Code of Federal Regulations.

8 List by name each radioisotope to be possessed and used under the license Example

A	B	C	D
(1) Iodine-131	(1) Iodide	(1) Not Applicable	(1) 10 millicuries
(2) Iodine-131	(2) Iodinated Human Serum Albumin	(2) N A	(2) 1 millicurie
(3) Krypton-85	(3) Gas	(3) N A	(3) 1 millicurie
(4) Cesium-137	(4) Sealed Source	(4) Iso Corp Model Z-78	(4) 2 source of 150 millicuries each

Attach additional properly keyed sheets if more space is needed

8 1 State the use of each licensed material listed in 8 A, B, C and D

9 Description of containers and/or devices in which sealed sources listed in Item 8 will be stored or used. Example

A	B	C
(1) [illegible] Source housing	Iso Corp	Model Z-278

10 18 Self-explanatory (For those items that do not apply indicate as N A (not applicable)

PRIVACY ACT STATEMENT

Pursuant to 5 U S C 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on Forms NRC-313M, NRC-313a, NRC-313I or NRC-313R This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45 134 (October 1, 1975)

1 AUTHORITY Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b))

2 PRINCIPAL PURPOSE(S) The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 C F R Parts 30-36 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a byproduct material license or amendment thereof

3 ROUTINE USES The information may be used: (a) to provide records to State health departments for their information and use, and (b) to provide information to Federal, State, and local health officials and other persons in the event of incident of exposure for their information, investigation, and protection of the public health and safety The information may also be disclosed to appropriate Federal, State and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for a NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you A copy of the license issued will routinely be placed in the NRC's Public Document Room, 1717 H Street, N W., Washington, D C

4 WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION Disclosure of the requested information is voluntary If the request information is not furnished, however, the application for byproduct material license or amendment thereof, will not be processed

5 SYSTEM MANAGER(S) AND ADDRESS Director, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U S Nuclear Regulatory Commission, Washington, D C 20555

FORM NRC-313 I (1-79) U.S. NUCLEAR REGULATORY COMMISSION
10 CFR 30

APPLICATION FOR BYPRODUCT MATERIAL LICENSE
INDUSTRIAL

See attached instructions for details.

Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.

1. APPLICATION FOR: *(Check and/or complete as appropriate)*

- ☐ a. NEW LICENSE
- ☐ b. AMENDMENT TO LICENSE NUMBER
- ☐ c. RENEWAL OF LICENSE NUMBER

2. APPLICANT'S NAME *(Institution, firm, person, etc.)*

TELEPHONE NUMBER AREA CODE – NUMBER EXTENSION

3. NAME OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION

TELEPHONE NUMBER AREA CODE – NUMBER EXTENSION

4. APPLICANT'S MAILING ADDRESS *(Include Zip Code)*

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED *(Include Zip Code)*

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL
(See Items 16 and 17 for required training and experience of each individual named below)

	FULL NAME	TITLE
a		
b		
c.		

7. RADIATION PROTECTION OFFICER

Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.

8. LICENSED MATERIAL

LINE NO.	ELEMENT AND MASS NUMBER A	CHEMICAL AND/OR PHYSICAL FORM B	NAME OF MANUFACTURER AND MODEL NUMBER *(If Sealed Source)* C	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME D
(1)				
(2)				
(3)				
(4)				

	DESCRIBE USE OF LICENSED MATERIAL E
(1)	
(2)	
(3)	
(4)	

FORM NRC-313 I (1-79)

9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)			
(2)			
(3)			
(4)			

10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED *(alpha, beta, gamma, neutron)* E	SENSITIVITY RANGE *(milliroentgens/hour or counts/minute)* F
(1)						
(2)						
(3)						
(4)						

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☐ a. CALIBRATED BY SERVICE COMPANY

NAME, ADDRESS, AND FREQUENCY

☐ b. CALIBRATED BY APPLICANT

Attach a separate sheet describing method, frequency and standards used for calibrating instruments.

12. PERSONNEL MONITORING DEVICES

TYPE *(Check and/or complete as appropriate.)* A	SUPPLIER *(Service Company)* B	EXCHANGE FREQUENCY C
☐ (1) FILM BADGE ☐ (2) THERMOLUMINESCENCE DOSIMETER *(TLD)* ☐ (3) OTHER *(Specify)* _____		☐ MONTHLY ☐ QUARTERLY ☐ OTHER *(Specify)* _____

13. FACILITIES AND EQUIPMENT (Check were appropriate and attach annotated sketch(es) and description(s).

☐ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS *(Include filtration, if any)*, ETC
☐ b. STORAGE FACILITIES CONTAINERS, SPECIAL SHIELDING *(fixed and/or temporary)*, ETC
☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC

14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED

b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE.

INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. RADIATION PROTECTION PROGRAM. Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures *(if needed)*, day-to-day general safety instruction to be followed, etc If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.

16. FORMAL TRAINING IN RADIATION SAFETY. Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc

    a. Principles and practices of radiation protection.

    b Radioactivity measurement standardization and monitoring techniques and instruments.

    c. Mathematics and calculations basic to the use and measurement of radioactivity

    d Biological effects of radiation.

17. EXPERIENCE. Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

18. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

WARNING 18 U.S.C Section 1001, Act of June 25, 1948; 62 Stat 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

a LICENSE FEE REQUIRED *(See Section 170.31 10 CFR 170)*	b. CERTIFYING OFFICIAL *(Signature)*
	c. NAME *(Type or print)*
(1) LICENSE FEE CATEGORY	d TITLE
(2) LICENSE FEE ENCLOSED $	e DATE

FORM NRC-313 ((1 79)

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

July 1984

ERRATA

REGULATORY GUIDE 10.7, Revision 1

GUIDE FOR THE PREPARATION OF APPLICATIONS FOR LICENSES FOR LABORATORY AND INDUSTRIAL USE OF SMALL QUANTITIES OF BYPRODUCT MATERIAL

Regulatory Guide 10.7, Revision 1, provides directions for using Form NRC-313I in preparing applications for licenses for laboratory and industrial use of small quantities of byproduct material. The NRC is now using a new NRC Form 313 for all byproduct material applications and is discontinuing the use of Form NRC-313I. The NRC is developing Revision 2 of Regulatory Guide 10.7 to conform to the new NRC Form 313. Until Revision 2 is issued, this errata sheet provides the information needed to use the new NRC Form 313.

The new NRC Form 313 does not have space for providing the information requested in Items 5 through 11. Please provide the information on 8-1/2 x 11 inch paper.

In the left-hand column of the following table are listed items of the old Form NRC-313I, most of which are also called out in Regulatory Guide 10.7, Revision 1. The right-hand column identifies the corresponding item of the new NRC Form 313 in which responses should be made.

Guide and Old Form NRC-313I	New NRC Form 313
Item 1*	Item 1
Item 2	Item 2
Item 3	Item 4
Item 4	Item 2
Item 5	Item 3
Item 6	Item 8
Item 7	Item 7
Item 8	Items 5 and 6
Item 9	Item 9
Item 10	Item 10
Item 11	Item 10

Item 12	Item 10
Item 13	Item 9
Item 14	Item 11
Item 15	Item 10
Item 16	Items 7 and 8
Item 17	Item 7
Item 18*	Items 12 and 13

*Not called out in Regulatory Guide 10.7, Revision 1.

The following cross-reference table may be helpful to you:

New NRC Form 313	Old Form NRC-313I
Item 1	Item 1
Item 2	Items 2 and 4
Item 3	Item 5
Item 4	Item 3
Item 5	Items 8A, B, C, and D
Item 6	Item 8E
Item 7	Items 7, 16, and 17
Item 8	Items 6 and 16
Item 9	Items 9 and 13
Item 10	Items 10, 11, 12, and 15
Item 11	Item 14
Item 12	Items 18a(1) and (2)
Item 13	Items 18b, c, d, and e
Item 14	N/A

NRC FORM 313
(84)
10 CFR 30, 32, 33, 34, 35 and 40

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB
3150-0120
Expires: 5-31-87

APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

FEDERAL AGENCIES FILE APPLICATIONS WITH:

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DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20555

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS, IF YOU ARE LOCATED IN

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U.S. NUCLEAR REGULATORY COMMISSION, REGION I
NUCLEAR MATERIAL SECTION B
631 PARK AVENUE
KING OF PRUSSIA, PA 19406

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION II
MATERIAL RADIATION PROTECTION SECTION
101 MARIETTA STREET, SUITE 2900
ATLANTA, GA 30323

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION III
MATERIALS LICENSING SECTION
799 ROOSEVELT ROAD
GLEN ELLYN, IL 60137

ARKANSAS, COLORADO, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, SOUTH DAKOTA, TEXAS, UTAH, OR WYOMING, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
MATERIAL RADIATION PROTECTION SECTION
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TX 76011

ALASKA, ARIZONA, CALIFORNIA, HAWAII, NEVADA, OREGON, WASHINGTON, AND U.S. TERRITORIES AND POSSESSIONS IN THE PACIFIC, SEND APPLICATIONS TO:

U.S. NUCLEAR REGULATORY COMMISSION, REGION V
MATERIAL RADIATION PROTECTION SECTION
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94596

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR *(Check appropriate item)*

- ☐ A. NEW LICENSE
- ☐ B. AMENDMENT TO LICENSE NUMBER _____
- ☐ C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT *(Include Zip Code)*

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION | TELEPHONE NUMBER

SUBMIT ITEMS 5 THROUGH 11 ON 8½ x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL
a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT

12. LICENSEE FEES *(See 10 CFR 170 and Section 170.31)*
FEE CATEGORY | AMOUNT ENCLOSED $

13. CERTIFICATION *(Must be completed by applicant)* THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948, 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

SIGNATURE, CERTIFYING OFFICER	TYPED/PRINTED NAME	TITLE	DATE

14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS
- ☐ $250K
- ☐ $250K – 500K
- ☐ $500K – 750K
- ☐ $750K – 1M
- ☐ $1M – 3.5M
- ☐ $3.5M – 7M
- ☐ $7M – 10M
- ☐ >$10M

b. NUMBER OF EMPLOYEES *(Total for entire facility excluding outside contractors)*

c. NUMBER OF BEDS

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION *(Dollar and/or staff hours)* ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? *(NRC regulations permit it to protect confidential commercial or financial—proprietary—information furnished to the agency in confidence)*

☐ YES ☐ NO

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS	APPROVED BY
AMOUNT RECEIVED	CHECK NUMBER			DATE

PRIVACY ACT STATEMENT ON THE REVERSE

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).

2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.

3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.

5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

NRC FORM 313
(84)
10 CFR 30, 32, 33, 34, 35, and 40

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB
3150-0120
Expires 5-31-87

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a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time

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7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE

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FEE CATEGORY | AMOUNT ENCLOSED $

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3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

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5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555

NRC FORM 313
(6-84)
10 CFR 30, 32, 33, 34, 35 and 40

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED BY OMB
3150-0120
Expires: 5-31-87

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ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

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1450 MARIA LANE, SUITE 210
WALNUT CREEK, CA 94596

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.

1. THIS IS AN APPLICATION FOR *(Check appropriate item)*

- ☐ A. NEW LICENSE
- ☐ B. AMENDMENT TO LICENSE NUMBER _____
- ☐ C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT *(Include Zip Code)*

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION | TELEPHONE NUMBER

SUBMIT ITEMS 5 THROUGH 11 ON 8½ x 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL
a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSEE FEES *(See 10 CFR 170 and Section 170.31)*
FEE CATEGORY | AMOUNT ENCLOSED $

13. CERTIFICATION *(Must be completed by applicant)* THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, AND 40 AND THAT ALL INFORMATION CONTAINED HEREIN, IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948, 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

SIGNATURE: CERTIFYING OFFICER	TYPED/PRINTED NAME	TITLE	DATE

14. VOLUNTARY ECONOMIC DATA

a. ANNUAL RECEIPTS
- ☐ < $250K
- ☐ $250K – 500K
- ☐ $500K – 750K
- ☐ $750K – 1M
- ☐ $1M – 3.5M
- ☐ $3.5M – 7M
- ☐ $7M – 10M
- ☐ > $10M

b. NUMBER OF EMPLOYEES *(Total for entire facility excluding outside contractors)*

c. NUMBER OF BEDS

d. WOULD YOU BE WILLING TO FURNISH COST INFORMATION *(dollar and/or staff hours)* ON THE ECONOMIC IMPACT OF CURRENT NRC REGULATIONS OR ANY FUTURE PROPOSED NRC REGULATIONS THAT MAY AFFECT YOU? *(NRC regulations permit it to protect confidential commercial or financial—proprietary—information furnished to the agency in confidence)*

☐ YES ☐ NO

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	COMMENTS	APPROVED BY
AMOUNT RECEIVED	CHECK NUMBER			DATE

PRIVACY ACT STATEMENT ON THE REVERSE

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 313. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. **AUTHORITY:** Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).

2. **PRINCIPAL PURPOSE(S):** The information is evaluated by the NRC staff pursuant to the criteria set forth in 10 CFR Parts 30, 32, 33, 34, 35 and 40 to determine whether the application meets the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations, for the issuance of a radioactive material license or amendment thereof.

3. **ROUTINE USES:** The information may be (a) provided to State health departments for their information and use; and (b) provided to Federal, State, and local health officials and other persons in the event of incident or exposure, for their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, and local agencies in the event that the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. **WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION:** Disclosure of the requested information is voluntary. If the requested information is not furnished, however, the application for radioactive material license, or amendment thereof, will not be processed. A request that information be held from public inspection must be in accordance with the provisions of 10 CFR 2.790. Withholding from public inspection shall not affect the right, if any, of persons properly and directly concerned need to inspect the document.

5. **SYSTEM MANAGER(S) AND ADDRESS:** U.S. Nuclear Regulatory Commission
Director, Division of Fuel Cycle and Material Safety
Office of Nuclear Material Safety and Safeguards
Washington, D.C. 20555