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REGULATORY GUIDE

OFFICE OF NUCLEAR REGULATORY RESEARCH

REGULATORY GUIDE 10.4
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GUIDE FOR THE PREPARATION OF APPLICATIONS FOR LICENSES TO PROCESS SOURCE MATERIAL

USNRC REGULATORY GUIDES

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This guide was issued after consideration of comments received from the public. Comments and suggestions for improvements in these guides are encouraged at all times, and guides will be revised, as appropriate, to accommodate comments and to reflect new information or experience.

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1. INTRODUCTION

1.1 PURPOSE OF GUIDE

The purpose of this regulatory guide is to provide assistance to applicants and licensees in preparing applications for new licenses, license amendments, and license renewals for the use of source material in such activities as research and development, the use of source material as shielding, manufacturing depleted uranium and thorium-magnesium alloy products, manufacturing glass containing uranium, manufacturing and distributing other products containing source material, or shaping, grinding, and polishing lenses containing thorium. This guide does not apply to (1) activities related to the reactor fuel cycle, such as uranium and thorium mill operation and uranium hexafluoride production, and (2) large-scale processing of source material for extraction of metallic compounds such as zirconium or hafnium.

1.2 APPLICABLE REGULATIONS

NRC regulations on licensing source material are in 10 CFR Part 40, "Domestic Licensing of Source Material." Source material means (1) uranium or thorium, or any combination of them, in any physical or chemical form or (2) ores that contain by weight 0.05% or more of uranium, thorium, or any combination of them. Source material does not include special nuclear material. In addition to 10 CFR Part 40, other regulations pertaining to this type of license are found in 10 CFR Part 19, "Notices, Instructions, and Reports to Workers; Inspections"; 10 CFR Part 20, "Standards for Protection Against Radiation"; 10 CFR Part 71, "Packaging and Transportation of Radioactive Material"; and 10 CFR Part 170, "Fees for Facilities and Materials Licenses and Other Regulatory Services Under the Atomic Energy Act of 1954, as Amended." It is your responsibility as an applicant and as a licensee to have copies of and to abide by each regulation. As a licensee, you are subject to all applicable provisions of the regulations that pertain to the use of source material.

This guide identifies the information needed to complete NRC Form 313 for applications for a license for the use of source material. The information collection requirements in NRC Form 313 have been cleared under OMB Clearance No. 3150-0120.

1.3 AS LOW AS IS REASONABLY ACHIEVABLE (ALARA) PHILOSOPHY

Paragraph 20.1(c) of 10 CFR Part 20 states "...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." 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. As an applicant, you should consider the ALARA philosophy as described in Regulatory Guide 8.10 in developing plans for work with licensed radioactive materials.

1.4 EXEMPTIONS AND GENERAL LICENSES

Although this guide covers the preparation of applications for specific licenses, you should be aware of the existence of exemptions and general licenses. Exemptions and general licenses are effective without filing an application or being issued specific documents; whereas specific licenses require filing an application and a license being issued to specific persons. You should refer to §§ 40.11 to 40.27 of 10 CFR Part 40 for a complete list of exemptions and general licenses.

2. FILING AN APPLICATION

You, as the applicant for a materials license, should complete NRC Form 313 (see Appendix A to this guide). You should complete Items 1 through 4, 12, and 13 on the form itself, and, if you so choose, Item 14. For Items 5 through 11, submit the information on supplementary pages. Each separate sheet or document submitted with the application should be identified and keyed to the item number on the application to which it refers. All typed pages, sketches, and, if possible, drawings should be on 8-1/2 x 11 inch paper to facilitate handling and review. If larger drawings are necessary, they should be folded to 8-1/2 x 11 inches.

You should complete all items in the application in enough detail for the NRC to determine that your equipment, facilities, training and experience, and radiation safety program are adequate to protect health and minimize danger to life and property.

You must file your application in duplicate. Retain one copy for yourself, because the license will require that you possess and use licensed material in accordance with the statements and representations in your application and any supplements to it not disapproved by the NRC.

If you wish to possess or use licensed material on Federal property or in any State subject to NRC jurisdiction, you should file your application with the NRC Regional Office for the State in which the material will be possessed or used.

If you are located in Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, or Vermont, send your applications to the U.S. Nuclear Regulatory Commission, Region I, Nuclear Material Section B, 631 Park Avenue, King of Prussia, PA 19406.

If you are located in Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Puerto Rico, South Carolina, Tennessee, Virginia, Virgin Islands, or West Virginia, send your applications to the 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 your applications to the U.S. Nuclear Regulatory Commission, Region III, Material Licensing Section, 799 Roosevelt Road, Glen Ellyn, IL 60137.

If you are located in Arkansas, Colorado, Idaho, Kansas, Louisiana, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, or Wyoming, send your applications to the U.S. Nuclear Regulatory Commission, Region IV, Material Radiation Protection Section, 611 Ryan Plaza Drive, Suite 1000, Arlington, TX 76011.

If you are located in Alaska, Arizona, California, Hawaii, Nevada, Oregon, Washington, or U.S. territories and possessions in the Pacific, send your applications to the U.S. Nuclear Regulatory Commission, Region V, Material Radiation Protection Section, 1450 Maria Lane, Suite 210, Walnut Creek, CA 94596.

Twenty-nine States to date have entered into agreements with the NRC that give them the authority to license radioactive materials used or possessed within their borders. These States are called Agreement States. A current list of Agreement States (including names, addresses, and telephone numbers of responsible officials) may be obtained upon request from the Medical, Academic, and Commercial Use Safety Branch, U.S. Nuclear Regulatory Commission, Washington, DC 20555, or from NRC's Regional Offices, whose addresses are listed above. If you are a non-Federal organization who wishes to possess or use licensed material in one of these Agreement States, your application form should be obtained from and filed with the State's radiation control program and not with the NRC.

2.1 PROPRIETARY AND PERSONAL INFORMATION

Please note that license applications and related documents are available for review by the general public in the NRC Public Document Rooms. You should not submit proprietary information unless it is essential to give a complete description of your equipment, facilities, and radiation protection program. If you cannot avoid the use of proprietary information, you should separate the proprietary information from the rest of the application and submit a request for withholding from public inspection in conformance with the requirements of § 2.790 of 10 CFR Part 2. Failure to follow this procedure may result in disclosure of the proprietary information to the general public or substantial delays in processing your application.

Do not submit personal information about your employees except as it relates to your radiation safety program. For example, the training and experience of individuals should be described to demonstrate their ability to manage radiation safety programs. Home addresses and home telephone numbers should be submitted only if they are part of an emergency response plan. Dates of birth, Social Security numbers, and radiation dose information should be submitted only if specifically requested by NRC.

2.2 ENVIRONMENTAL INFORMATION

The NRC does not ordinarily require a formal environmental report for the type of activities included in this regulatory guide. However, if your operations have the potential for significantly affecting the quality of the environment (for example, certain large-scale manufacturing operations and associated waste storage and disposal activities), the NRC may require evaluation pursuant to 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions." Prior to submitting information pursuant to the Part 51 requirements, you should contact NRC material licensing personnel for assistance.

2.3 PHYSICAL PROTECTION AND SAFEGUARDS INFORMATION

Specific information on physical protection and safeguards programs for source material need only be provided in response to a specific request from NRC. (See paragraph 40.31(g) of 10 CFR Part 40.)

The NRC uses an electronic data processing procedure to record inventories and transfer of source material. This system uses a 3-letter Reporting Identification Symbol (RIS) to identify licensees who must submit material transfer reports and periodic material status reports in accordance with § 40.64 of 10 CFR Part 40. The NRC will assign you a Reporting Identification Symbol and will tell you how to use it if your license or license amendment authorizes quantities of source material greater than those specified in § 40.64.

3. CONTENTS OF AN APPLICATION

If your intended use of source material will involve only prefabricated products (such as clad uranium metal for accelerator shielding) and you will perform no chemical, physical, or metallurgical operations, complete Items 1 through 8, 11, 12, and 13 of NRC Form 313. However, if your use of source material will involve chemical, physical, or metallurgical operations (for example, metal-forming operations, cutting and grinding, fabrication of parts, or destructive testing of parts containing source material), you should complete Items 1 through 13 of the form.

The following apply to the indicated items of NRC Form 313.

Item 1 - LICENSE INFORMATION

For a new license, check subitem A. For an amendment to an existing license, check subitem B. For a renewal of an existing license, check subitem C.

Item 2 - NAME AND MAILING ADDRESS OF APPLICANT

The applicant should be the corporation or other legal entity applying for the license. If you are an individual, you may be an applicant only if you are acting in a private capacity and the use of the source material is not connected with your employment by a corporation or other legal entity.

The address specified here should be your mailing address for correspondence. This may or may not be the same as the address at which the material will be used, as specified in Item 3.

Item 3 - LOCATIONS OF USE

You should specify each location of use by the street address, city, and State or other descriptive address (such as 5 miles east on Highway 10, Anytown, State) to allow us to easily locate your facilities. A Post Office box address is not acceptable. If source material is to be used at more than one location, you must give the specific address of each location. In Items 5 through 11 of the application, describe the intended use and the facilities and equipment at each location.

Item 4 - PERSON TO BE CONTACTED ABOUT APPLICATION

You should name the individual who knows your proposed radioactive materials program and can answer questions about your application, and you should note his or her telephone number. This individual will serve as the point of contact during the review of your application and during the period of your license. This person is usually the radiation safety officer or a principal user of radioactive materials. If this individual does not work for you full time, please specify his or her position and relationship to your firm. You should notify the NRC if the person assigned to this function changes.

Item 5 - MATERIAL TO BE POSSESSED

Specify each type of source material you wish to possess. The following is an example of the type of information that should be provided:

a. Element and Mass Number	b. Chemical and Physical Form (Including % U or Th)	c. Maximum Amount To Be Possessed at Any One Time (kilograms)
Natural Thorium	Thorium oxide not exceeding 4% alloyed with nickel	175
Natural Thorium	Solid thorium oxide	4
Natural Uranium	Uranium nitrate as solid crystals	0.5

NOTE: The number to be entered in subitem c is the weight of contained source material. In this example, the applicant plans to possess and use 4375 kg of nickel-thoria alloy with 4% thorium. The total weight of source material is:

4375 x 0.04 = 175 kg thorium. Enter 175 kg in subitem c.

Item 6 - PURPOSE FOR WHICH LICENSED MATERIAL WILL BE USED

Provide a clear and concise description of the purpose for which source material will be used. If chemical, physical, or metallurgical operations are to be performed (for example, shaping, grinding, smelting, testing, dissolving, catalytic reactions), describe the specific processes and tell how much source material is used in each. If the source material is to be used in a product for commercial distribution, name the product and specify the quantity or percent by weight of source material in the finished product.

Paragraphs 40.13(c) and (d) of 10 CFR Part 40 allow distribution of certain products containing source material to the general public. The manufacturer must ensure that the quantity of source material in the product does not exceed the quantity specified for that product in § 40.13. If your planned use of source material includes distribution of products specified in § 40.13, the following information should be provided:

1. The type and quantity of source material in each product.

2. The chemical and physical form of the source material.

3. The solubility of the identified source material.

4. The method for retaining source material in the product during normal and abnormal conditions of use.

5. The maximum external radiation levels at 5 and 25 centimeters from the surface of the product.

6. The estimated total quantity of source material you will distribute annually.

Item 7 - INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY--THEIR TRAINING AND EXPERIENCE

Paragraph 40.32(b) of 10 CFR Part 40 specifies that your staff (the users, supervisors of users, and radiation safety officer for an institutional applicant) must be qualified by training and experience to use the material for the purposes requested in a manner that protects health and minimizes danger to life or property. Persons responsible for radiation safety must be able to recognize potential hazards, develop a radiation safety program to protect against these hazards, train workers in safe work practices, and supervise day-to-day radiation safety operations. You should provide the following information:

1. The name of the radiation safety officer (RSO); that is, the person who will be responsible for the safe conduct of your source material operations and compliance with regulatory requirements.

2. The names of individuals who will supervise the use of radioactive material and individuals who will work with radioactive material without supervision.

3. For each individual, a summary of his or her formal training in radiation safety, including who conducted the courses, the topics covered, and the locations and dates of the courses.

4. For each individual, a summary of his or her actual experience in radiation protection, particularly in the use of loose source material or other radioactive material of similar hazard. Specify places and dates and identify the types and quantities of radioactive material.

The individuals specified above should have successfully completed a formal course of approximately one week (40 hours) in the following topics:

- Principles and practices of radiation protection.
- Radioactivity measurements, monitoring techniques, and the use of instruments.
- Mathematics and calculations basic to the use and measurement of radioactivity.
- Biological effects of radiation.
- Safety practices applicable to protection from the radiation, chemical toxicity, and pyrophoric and explosive properties of source materials.

These individuals should also have had at least a 3-week on-the-job radiation protection training program under the direct supervision of an individual named on an NRC or Agreement State license authorizing the use of loose source material or other radioactive material of similar hazard. This on-the-job training should include the following:

- Conducting actual surveys under operating conditions and evaluating the results (including meter surveys, smear surveys, and air samples).
- Safe procedures for working with source material.
- Evaluating radioactive material processing facilities for proper operations from the radiological safety standpoint.
- Procedures for determining the need for bioassays.
- Becoming familiar with 10 CFR Part 20, the terms and conditions of licenses, and the content of standard operating and emergency procedures.

Item 8 - TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

According to § 19.12 of 10 CFR Part 19, all individuals who work in or frequent restricted areas must be instructed in the health protection problems associated with exposure to radioactive material. In addition, persons who actually work with radioactive material should receive training in the safe use of radioactive material. This training should be given prior to any work assignments with radioactive material and should be updated at least annually.

You should submit a general description of the training you will provide to individuals working in or frequenting your restricted areas, including:

1. An outline showing your training objectives and the topics (with major subheadings) to be covered. The extent of instruction should be commensurate with potential radiological problems in your restricted areas and should include at least the following topics:

- Identification of licensed radioactive materials and radiological hazards present in the restricted area to be entered by the individual.

- Precautions and procedures to minimize exposures and the spread of contamination.

- Purposes and functions of protective devices required.

- Applicable NRC regulations to be observed by individuals working in or frequenting restricted areas.

- Terms of NRC licenses applicable to employees working in or frequenting restricted areas.

- Standard operating and emergency procedures to be followed by individuals working in or frequenting restricted areas.

- Responsibility of individuals to report unsafe acts or conditions observed in restricted areas.

- Rights of employees to receive radiation exposure reports upon request.

- For persons who actually work with radioactive material, instructions for the safe use of radioactive material.

2. The duration and frequency of training.

3. Your means for testing the comprehension of participants, i.e., practical exercise, oral test, or written test (include a sample).

4. Your method for recording participation.

5. The name, title, and qualifications of the individual responsible for conducting the training.

Item 9 - FACILITIES AND EQUIPMENT

Your facilities and equipment must be adequate to protect health and minimize danger to life or property. The facilities and equipment for a radioactive materials program should be appropriate to the quantities and types of materials to be used, to the uses and processes to be conducted, and to the frequency and duration of the manipulations or processes.

You should describe your equipment and facilities for the requested use of source material. If you list more than one location of use in Item 3, describe the facilities and equipment for each location. In selecting your equipment and facilities, consider the following:

1. Radioactive materials should be used in a restricted area, i.e., an area to which the licensee controls access in order to protect individuals from exposure to radiation and radioactive materials. According to § 20.207 of 10 CFR Part 20, licensed materials stored in unrestricted areas must be secured

from unauthorized removal, and licensed materials in an unrestricted area and not in storage must be under the constant surveillance and immediate control of the licensee.

2. Bench-top or open work areas may be used for sealed sources, for small quantities of solid materials in any form not likely to become airborne, and for small quantities of liquids of sufficiently low volatility that they are not likely to cause airborne contamination or toxicity problems. Trays or absorbent surface covers to catch and retain spilled liquids should be used on open work surfaces and inside the closed systems discussed below. Surfaces should be nonporous to facilitate decontamination.

3. Radioactive materials handled or processed in unsealed forms should be confined to control the release of material and to prevent the spread of contamination. Gaseous, volatile, and finely divided solid materials should be handled in closed or isolated systems such as glove boxes or fume hoods with filtered exhaust systems.

4. Appropriate fume hoods should be used for gases and volatile materials in sealed systems that are susceptible to rupture, for unsealed volatile materials, and for processes such as evaporation that release gases or vapors. Hoods provide emergency ventilation and exhaust for unplanned releases (such as an accidental rupture of a sealed gas system) as well as routine dilution and exhaust of effluents produced by evaporation. Filters, absorbers, or scrubbers may be required for removal of particulates, gases, and volatile material from the exhaust system so that releases of radioactive material will comply with §§ 20.103 and 20.106 of 10 CFR Part 20.

5. The facilities proposed for any use of source materials must be appropriate to the type and quantity of materials to be used and to the type and duration of operations to be conducted. The facilities and equipment chosen must provide reasonable assurance that the permissible personnel exposure limits (of §§ 20.101, 20.103, and 20.104 of 10 CFR Part 20) will not be exceeded in restricted areas and that the permissible levels of radiation and radioactivity in effluents (§§ 20.105 and 20.106, respectively) will not be exceeded in unrestricted areas.

You should submit a drawing or sketch of all laboratories or work areas where radioactive materials, including radioactive wastes, will be used, processed, or stored. These drawings should include the identification and location of fixed radiation protection equipment. Storage containers and facilities should provide both shielding and security for materials. The drawings should also show the relationship and distance between restricted areas where radioactive materials will be handled and adjacent unrestricted areas. Drawings or sketches should be drawn to an indicated scale, or dimensions should be included on each drawing or sketch.

For programs in which radioactive material may become airborne or may be included in airborne effluents, the drawings or sketches should include a schematic description of the ventilation system annotated to show airflow rates, filtration and other effluent treatment equipment, and air and effluent monitoring instruments.

If there is a potential for contamination of waste water, the waste water processing system should be described.

If respiratory protective equipment will be used to limit the inhalation of airborne material, follow the provisions of § 20.103 of 10 CFR Part 20 and submit appropriate information.

NOTE: If your analysis shows that you can maintain exposure levels within the limits in 10 CFR Part 20 without the use of special facilities, provide a written statement of this and include a complete justification for your conclusion.

Item 10 - RADIATION SAFETY PROGRAM

10.1 Personnel Monitoring Devices

According to § 20.202 of 10 CFR Part 20, persons in restricted areas who are likely to receive doses of radiation in excess of stated limits and persons in high radiation areas must use personnel monitoring devices. If you have such areas within your facility or if you intend to monitor your personnel to ensure that they do not receive exposures in excess of those specified by the NRC, specify the type of device (film badge, thermoluminescent dosimeter (TLD)) you will use and the interval between exchanges. Extremity monitoring should be considered because it often provides a more accurate representation of the dose from source material. If pocket chambers or pocket dosimeters will be used, you should specify the useful range, the frequency of reading, and the procedures for their maintenance and calibration.

The usual personnel monitoring devices are film badges or TLDs that are furnished and processed by commercial suppliers.* It is possible for qualified licensees to process their own film badges or TLDs, but this is seldom done. The reports furnished by processors of these devices provide a permanent record of exposures to personnel.

Film badges are usually exchanged at 1-month intervals since longer intervals can result in film fading and inaccurate readings. TLDs can be exchanged at intervals of up to 3 months. Shorter exchange intervals are useful when exposures may vary considerably from job to job or when they are likely to be a substantial fraction of permissible doses. However, too-frequent exchange may give inaccurate results because of low readings.

Pocket chambers and pocket dosimeters should be used only to supplement, not to replace, film badges and TLDs. Pocket chambers and pocket dosimeters are useful for frequent checks by the user on incremental exposures received during short-term operations. Although the readings from pocket chambers and dosimeters may be recorded, these are not considered as reliable as exposures reported in writing by film badge and TLD processors.

*Applicants should note that on February 13, 1987, the NRC published a final rule amending § 20.202 of 10 CFR Part 20 dealing with whole body personnel dosimetry devices, such as film badges and TLDs. These badges and TLDs must be processed by processors that have been accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Bureau of Standards. The effective date of the rule is February 12, 1988.

If you do not plan to use personnel monitoring devices, you must submit calculations, documentation from radiation surveys, prior personnel monitoring results, or other information to demonstrate that it is unlikely that any individual will receive a dose in excess of the limits specified in paragraphs 20.202(a)(1) and (2) of 10 CFR Part 20.

10.2 Bioassays

In issuing specific licenses, the NRC customarily requires bioassays when individuals work with source material in quantities, chemical and physical forms, and manipulations that make it likely that radionuclides will be ingested, inhaled, or absorbed. Guidance on bioassay programs for individuals using source material, including the levels and types of handling for which bioassays are indicated, is provided in Regulatory Guide 8.11, "Applications of Bioassay for Uranium." Although Regulatory Guide 8.11 deals specifically with depleted, natural, and enriched uranium, some of the methods are applicable to thorium as well. Your application for a specific license should include a discussion of your proposed use of bioassays, including the types and quantities of isotopes and the types and frequency of manipulations for which bioassays will be used. If you propose to use bioassays less conservatively than recommended in Regulatory Guide 8.11, you should state your rationale.

10.3 Surveys and Monitoring

The types, methods, and frequency of surveys should be appropriate to the types and quantities of materials used and to the types of operations performed. Describe your guidelines for performing surveys and monitoring, including approximate frequencies. Consider the following types of surveys for radiation and radioactive contamination as you prepare these procedures for your planned program.

1. In laboratory and plant areas (e.g., checking for contamination on bench tops, handling and storage equipment, clothing, hands). Surveys of external radiation levels should be made whenever radioactive material or sources are used in a configuration or at a level that is not already surveyed or well known. For a continuing or repetitive condition, a survey should be made initially, whenever the configuration or source size is changed, and periodically to verify that levels are essentially the same as previously surveyed.

2. During work with radiation or radioactive materials (e.g., airborne contamination or personnel exposure measurements, including extremities).

3. In areas associated with storage, disposal, or release of radioactive materials (e.g., checking storage and disposal sites and containers; liquid, gas, and particulate effluents; filters and duct systems).

4. In operations involving materials in gas, liquid, or finely divided forms. The survey program should monitor the adequacy of containment and control of the materials involved. Surveys and monitoring for airborne concentrations in restricted and unrestricted areas, for concentrations in air and water effluents released to unrestricted areas, and for surface contamination of personnel, facilities, and equipment should be made whenever the type and quantity of

material handled and the nature of the handling operations are such that releases of radioactivity or contamination are likely. Precautionary surveys should be made periodically if releases or spills of contamination are possible, even though they are not likely or expected.

5. In an air sampling program. Describe the area where samples will be taken, the frequency of sampling, and the location of the sampler with respect to restricted and unrestricted areas and work areas. Describe the type of assays to be performed to evaluate air samples and the methods used to relate results to actual personnel exposures.

6. In an effluent monitoring program for all airborne and liquid radioactive material releases to unrestricted areas. Calculational and theoretical evaluations should be supplemented by stack monitoring, waste-stream monitoring, water sampling, and other environmental monitoring appropriate for the planned and potential releases. Explain the basis for any decision not to take measurements.

The frequency of periodic surveys should be based on judgment considering the type and quantity of material and the kind and complexity of handling procedures. In areas where substantial quantities of material are handled and spills or releases are possible (as in chemical processing), surveys should be taken at least daily or after each operation. Laboratories handling small quantities in forms not likely to cause significant contamination may need to be surveyed only weekly or monthly.

Routine surveys of work areas are usually done by the workers in the area, and surveillance and verification surveys are performed periodically, e.g., quarterly, by the radiation safety officer or his or her staff.

Special surveys should be performed whenever there is an unusual event such as a spill or nonroutine handling of material under circumstances that release of material or contamination is possible.

Guidance may be obtained from the National Council on Radiation Protection Report No. 57, "Instruments and Monitoring Methods for Radiation Protection";* the International Atomic Energy Agency Technical Report Series No.120, "Monitoring of Radioactive Contamination on Surfaces";** and Regulatory Guides 8.21, "Health Physics Surveys for Byproduct Material at NRC-Licensed Processing and Manufacturing Plants," and 8.23, "Radiation Safety Surveys at Medical Institutions."

10.4 Radiation Detection Instruments and Instrument Calibration

You should provide information on the radiation detection and measuring instruments to be used for radiation protection measurements. In addition to survey and monitoring instruments, which are the primary radiation protection

*Copies may be obtained from NCRP Publications, 7910 Woodmont Ave., Suite 1016, Bethesda, MD 20814.

**Copies may be obtained from UNIPUB Inc., P.O. Box 433, Murray Hill Station, New York, NY 10157.

instruments, include a description of the quantitative measuring instruments needed to monitor the adequacy of radioactive materials containment and contamination control. Instruments used only for acquisition of data related to the use of radioactive materials and not to radiation protection need not be listed.

The following is a list of the minimum equipment deemed necessary for source material operations involving loose materials (possible surface or airborne contamination).

1. Portable survey meters capable of detecting the presence of beta and gamma surface contamination and measuring external radiation levels up to several hundred millirems per hour.

2. Air sampling devices with filter media that are 99% efficient for collecting particles with a diameter greater than 0.3 micrometer.

3. High-strength wipes for collection of removable surface contamination.

4. Low-level laboratory counting equipment for analysis of air samples, wipe samples, or water samples for alpha or beta radioactivity content.

5. Film badges or TLDs for monitoring external exposure doses to persons working in or frequenting restricted areas. You may obtain these devices from any commercial vendor and you should process (exchange) them at intervals not to exceed 1 month for film badges and 3 months for TLDs.*

Instrumentation may be described in a tabular listing:

A Type of Instrument	B Number Available	C Radiation Detected (alpha, beta, gamma, neutron)	D Sensitivity Range (millirem/hour or counts/minute)

NOTE: In Column A, include the window thickness of instruments for detecting alpha or beta particles.

Instruments for radiation protection measurements need not be present continuously in each room or laboratory, but they should be readily available at each licensed location of use (refer to Item 3). Radiation protection instruments may be used in more than one laboratory and moved about as needed, but they should be available in sufficient numbers to meet all simultaneous needs.

*As of February 12, 1988, § 20.202 of 10 CFR Part 20 will require whole body personnel dosimetry devices, such as film badges and TLDs, to be processed by processors that have been accredited by NVLAP of the National Bureau of Standards.

Surveying and monitoring instruments for measuring unsealed radioactive material (e.g., surface contamination, filters, and wipe tests) are usually the geiger probe type. The sensitivity range and window thickness of the probe must be appropriate to the type and quantity of material to be measured. These instruments read in either millirems per hour or counts per minute. If they read in millirems per hour, they can also be used to measure exposure rates from sealed or unsealed material up to the limit of the instrument scale.

Instruments should be calibrated and operable in order to perform appropriate surveys and monitoring. Your survey meters should be calibrated at least every 12 months and after any servicing of the instrument (other than a simple battery exchange). State the frequency of calibration for each listed instrument. There are three options for calibration:

1. If the instruments will be returned to the manufacturer for calibration, so state.

2. If a contractor will perform the calibration, state the name and address of the firm and its NRC or Agreement State license number.

3. If the instruments will be calibrated inhouse, provide the following additional information.

   - The name of the manufacturer and model number of each radiation source to be used,

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

   - The accuracy of each source and the traceability of the source to a primary radiation standard,

   - The step-by-step procedures, including associated radiation safety procedures, you will use in calibrating, and

   - The name of each individual who will perform the calibrations together with his or her experience and training in instrument calibration.

Note: Guidance is being developed on inhouse calibration of survey instruments. Draft Regulatory Guide FC 413-4, "Guide for the Preparation of Applications for Licenses for the Use of Radioactive Materials in Calibrating Radiation Survey and Monitoring Instruments," was issued for public comment in June 1985.

10.5 Radiation Safety Procedures

Your radiation safety procedures must be adequate to protect health and minimize danger to life and property according to paragraph 40.32(c) of 10 CFR Part 40. You should provide the following information about your radiation safety program. Exhibit 1 is an example of an acceptable radiation safety program submittal.

EXHIBIT 1

RADIATION SAFETY PROGRAM

Purpose

This is a formal planned program to protect the health of workers, minimize danger to life and property, and make every reasonable effort to maintain radiation exposures and releases of radioactive material in effluents to unrestricted areas as low as is reasonably achievable.

Scope

This program is applicable to the possession, use, storage, and transfer or disposal of all NRC-licensed materials.

References

1. 10 CFR Parts 19, 20, 40, and 71
2. NBS/ICRP Handbooks
3. Regulatory Guides

Responsibilities

1. Management (of the licensee) has overall responsibility for the radiation safety of all individuals who work in or frequent restricted areas under its control. In addition, management is responsible for compliance with applicable NRC regulations and the terms of its NRC license.

2. Radiation safety officers (or supervisors assigned radiation safety responsibilities) are responsible for the conduct of day-to-day radiation safety operations or program tasks set forth below, including the review and approval of standard operating and emergency procedures.

3. Supervisors are responsible for developing and implementing standard operating and emergency procedures applicable to operations under their supervisory control. This includes day-to-day radiation safety supervision and reporting to management unsafe acts or conditions that they cannot correct.

4. Workers are responsible for performing their jobs in a safe manner and in accordance with approved standard operating and emergency procedures. In addition, workers must be alert to and immediately report to their supervisor all unsafe acts or conditions noted in restricted areas.

Program Tasks

The following tasks are essential elements of the radiation safety program:

1. Provide training on a routine basis for personnel who work in or frequent restricted areas.

EXHIBIT 1 (Cont'd)

2. Develop and implement procedures for routine and emergency operations involving licensed materials.

3. Select, evaluate, and test facilities and equipment for radiological operations.

4. Provide radiological monitoring for personnel.

5. Control contamination.

6. Conduct area and effluent monitoring.

7. Obtain and comply with the NRC license for radioactive materials to be used.

8. Maintain inventory control of licensed materials.

9. Conduct investigations of all accidents or incidents and issue the necessary reports.

10. Conduct annual audits and evaluations of the effectiveness of the radiation safety program.

1. A description in outline form (with major subheadings) of your radiation safety program, including the following:

a. Program objectives

b. The responsibilities and duties with respect to radiation safety of management, radiation safety personnel, work supervisors, and workers

c. Primary program tasks

d. Methods for auditing and evaluating the effectiveness of your radiation safety program

2. A sample standard operating procedure (SOP) as developed and approved for an activity for which you are seeking a license. An SOP is a formal set of detailed instructions telling a worker how to perform an operation safely. The SOP is prepared as a cooperative effort between the individual most familiar with the operation and his or her supervisor. It is then reviewed by the RSO for radiological safety content and is approved by management for implementation by the supervisor. Exhibit 2 outlines the steps for preparing an SOP.

3. A sample emergency procedure that will be provided to personnel who work in or frequent restricted areas and that instructs personnel about actions they are to take in the event of fires, explosions, accidental releases of source material, or other potentially hazardous occurrences involving source material.

4. The formats (or forms) to be used by your personnel for recording:

- Results of personnel monitoring
- Results of radiological instrument calibrations
- Results of radiological surveys
- Quantities of radioactivity in effluents
- Inventories (receipts, transfers, or disposals) of source materials
- Accident and incident investigation reports
- Audits and evaluation of radiation safety program

5. A copy of your radiation surveying and monitoring procedures. As a minimum, these procedures should include:

- Areas or operations to be surveyed
- Types of surveys
- Frequency of surveys
- Acceptable contamination limits
- Records to be maintained.

Item 11 - WASTE MANAGEMENT

You should describe your methods for disposing of radioactive waste. Your application should include, when appropriate for the types of waste involved, provisions for monitoring and segregating waste materials (radioactive from nonradioactive and liquid from solid waste). Under NRC regulations, you may dispose of waste in the following ways:

EXHIBIT 2

STEPS FOR PREPARING AN SOP

1. Conduct a procedures analysis with respect to needed instruction, equipment, and work environment for the operation to be performed. Collect and summarize the following:

   - A description of the equipment or process and its purpose. Also include a statement of the overall degree of hazard expected.
   - A list of standards and publications applicable to the process.
   - Qualifications and training requirements for personnel.
   - A list of equipment needed and the operating and servicing instructions.
   - Requirements for specialized tools and associated equipment.
   - Requirements for general safety equipment, personnel monitoring, and protective clothing.
   - Requirements for ventilation control and air cleaning.
   - Step-by-step instructions for performing the operation with a corresponding hazards analysis.
   - Instructions for handling any waste generated.
   - Actions to be taken in the event of fire, explosion, release of surface or airborne source material, or other hazardous occurrence.

2. Review all the information with the RSO, safety officers, human factors engineer, or others as management may direct, and select information to be included in the SOP.

3. Prepare the SOP according to a logical format, for example:

   - Title
   - Purpose
   - Scope
   - References
   - Responsibilities
   - Step-by-step instructions, including radiation safety precautions
   - Authority (signature of person approving document)

1. Transfer to someone (usually a waste disposal company or the original supplier) properly licensed to receive radioactive waste in accordance with paragraph 20.301(a) of 10 CFR Part 20. State the name and license number of the receiving company (you should contact it in advance to determine any limitations that may apply to its acceptance of your waste).

2. Release into a sanitary sewer in conformance with § 20.303 of 10 CFR Part 20.

3. Release into air or water in concentrations allowed by § 20.106 of 10 CFR Part 20.

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

Regardless of the methods you may choose for disposal of your source material waste, you are expected to develop and implement procedures to minimize exposures of personnel and impact on the environment during handling, storage, and ultimate disposal. At a minimum, your procedures should include:

1. Assessment of the quantity and types of wastes to be generated.

2. Recording receipts, transfers, and disposals.

3. Providing storage facilities to secure waste against unauthorized access and to prevent weathering or other damage that could result in release of source materials.

4. Conducting surveying and monitoring operations to ensure compliance with the release limits of §§ 20.106 and 20.303 of 10 CFR Part 20.

Item 12 - LICENSE FEES

An application fee paid in full is required by paragraph 170.12(a) of 10 CFR Part 170 for most types of licenses, including applications for license amendments and renewals. You should refer to § 170.31, "Schedule of Fees for Materials Licenses and Other Regulatory Services," to determine the amount of the fee that must accompany your application. An application received without a fee or with an inadequate fee may be returned to you. All application fees may be charged regardless of the NRC's disposition of the application or your withdrawal of the application.

Item 13 - CERTIFICATION

Your application should be dated and signed by you if you are acting as an individual or by a representative of the corporation or legal entity who is authorized to sign official documents and to certify that the application contains information that is true and correct to the best of your knowledge and belief. Unsigned applications will be returned for proper signature.

Item 14 - VOLUNTARY ECONOMIC DATA

The Regulatory Flexibility Act of 1980 requires Federal agencies to consider the effects of their rules on small businesses and other small entities. In order for the NRC to maintain an up-to-date data base of its licensees, four categories of economic information are sought from applicants. These economic data will be used by the NRC to prepare regulatory analyses that contain, among other things, the anticipated economic burden a proposed rulemaking action will have on affected licensees. To the extent that it is possible and consistent with public health and safety, the NRC will consider the economic burden in light of the size of the entities affected by the rule in an attempt to mitigate the potential for a significant economic impact on a substantial number of small entities.

14.a Annual Receipts

Guidance for determining the appropriate box in 14.a, Annual Receipts:*

1. Holders of One NRC License. If your organization (named on the license or application) holds one NRC license and operates from one address, check the box that most closely approximates your annual receipts; in the case of hospitals, academic institutions, or other entities that do not operate on the basis of receipts, check the box that most closely approximates the annual operating budget of your organization.

2. Holders of Multiple NRC Licenses Issued for One Address. If your organization (named on the license or application) holds multiple NRC licenses, all of which are issued to the same address, check the box that most closely approximates the annual receipts or annual operating budget for your entire organization, regardless of the number of NRC licenses possessed at that single address.

3. Holders of Multiple NRC Licenses at Multiple Addresses. If your organization (named on the license or application) holds multiple NRC licenses at multiple addresses, check the box that most closely approximates the annual receipts or annual operating budget for the operations conducted at the address on this license or application and not for the entire corporate entity.

14.b Number of Employees

The number of employees reported should reflect all employees for the organization at the address listed on the license or application, excluding outside contractors. The number of employees reported should not be that of a single department or division within the organization.

*If the applicant is a university with a teaching hospital that operates under a separate annual budget and the applicant has been issued multiple licenses, the applicant should distinguish the figures that pertain solely to the university from those figures that pertain solely to the teaching hospital.

14.c Number of Beds (Hospitals Only)

Enter the total number of beds in the hospital excluding bassinets and nursing-home-type units.

14.d Would You Be Willing To Furnish Cost Information on the Economic Impact of Current Regulations or any Future Proposed NRC Regulations that May Affect You?

Indicate if you would be willing to furnish additional economic data to the NRC that would help the NRC evaluate the economic impact of a rule on affected licensees.

4. AMENDMENTS TO A LICENSE

After you are issued a license, you must conduct your program in accordance with (1) the statements, representations, and procedures contained in your application, (2) the terms and conditions of the license, and (3) the Nuclear Regulatory Commission's regulations.

It is your obligation to keep your license current. You should anticipate the need for a license amendment insofar as possible. If any of the information provided in the application is to be modified or changed, submit an application for a license amendment. In the meantime, you must comply with the terms and conditions of your license until it is actually amended; NRC regulations do not allow you to implement changes on the basis of a submission requesting an amendment to your license.

An application for a license amendment may be prepared either on the application form (NRC Form 313) or in letter form and should be submitted in duplicate to the address specified in Section 2 of this guide. Your application should identify your 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.

You must send the appropriate fee for a license amendment with your application. The NRC will not accept an application for filing or processing before the proper fee is paid in accordance with § 170.12 of 10 CFR Part 170.

5. RENEWAL OF A LICENSE

Licenses are issued for a period of up to 5 years. You must send two copies of your application for renewal to the address specified in Section 2 of this guide. You may submit an entirely new application for renewal as if it were an application for a new license without referring to previously submitted information.

As an alternative, you may:

1. Review your current license to determine whether the information accurately represents your current and anticipated program. Identify any necessary additions, deletions, or other changes and then prepare information appropriate for the needed additions or changes.

2. Review the documents you have submitted in the past to determine whether the information in them is up to date and accurately represents your management control program, facilities, equipment, personnel, radiation safety procedures, locations of use, and any other information pertinent to your program. The documents you consider to represent your current program should be identified by date. Any out-of-date or superseded documents should also be identified, and changes should be made in these documents as necessary to reflect your current program.

3. Review NRC regulations to ensure that any changes in the regulations are appropriately covered in the program description.

4. After you have completed your review, submit two copies of a letter, with the proper fee, requesting renewal of your license and providing the information specified in items 1, 2, and 3 as necessary. If your current license and supporting documents accurately reflect your current program, state that operations will continue in accordance with those documents and applicable NRC regulations and license conditions.

5. Include the name and telephone number of the person to be contacted about your renewal application and include your current mailing address if it is not indicated correctly on your license.

If you file your application for license renewal at least 30 days before the expiration date of your license and include the appropriate fee for license renewal, your present license will automatically remain in effect until the NRC takes final action on your renewal application. However, if you file the application less than 30 days before the expiration date and the NRC cannot process it before that date, you would be without a valid license when your license expires.

It is important that the appropriate fee accompany your application for license renewal. In accordance with § 170.12 of 10 CFR Part 170, the NRC will not accept an application for filing or processing before the proper fee is paid.

If you do not wish to renew your license, you must dispose of all licensed radioactive material you possess in a manner authorized by 10 CFR Part 20. Complete NRC Form 314, "Certificate of Disposition of Materials," and send it to the NRC before the expiration date of your license with a request that your license be terminated.

If you cannot dispose of all the licensed radioactive material in your possession before the expiration date, you must request a license renewal for storage only of the radioactive material. This renewal is necessary to avoid violating NRC's regulations that do not allow you to possess licensable material without a valid license.

6. IMPLEMENTATION

The purpose of this section is to provide information to you about the NRC staff's plan for using this regulatory guide and how these plans affect you.

This guide was distributed for public comment as Task FC 409-4 in April 1985 to encourage public participation in its development. This Revision 2 represents the final position of the NRC, which was made after considering the public comments that were received on the draft guide.

The draft guide and final guide differ somewhat. If your license was issued or amended based on recommendations in the draft guide that are more restrictive than those in the final guide, you may choose to request an amendment to your license to incorporate the less restrictive guidance.

In cases where the final guide is more restrictive than the draft guide, licensing actions already completed will not be affected because all required regulatory findings have been made. However, the more restrictive recommendations in the final guide reflect items identified by the NRC staff as important to health and safety. Discrepancies may be addressed for effective licenses by license amendment or rule change. In unusual cases in which immediate action is required, you would be contacted directly by the NRC.

The information in this regulatory guide is guidance, not requirements. The NRC reviews each application to ensure that users of source material are capable of complying with NRC's regulations. This guide provides one set of methods approved by the NRC for meeting the regulations.

APPENDIX A

NRC FORM 313
(1-84)
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:

U.S. NUCLEAR REGULATORY COMMISSION
DIVISION OF FUEL CYCLE AND MATERIAL SAFETY, NMSS
WASHINGTON, DC 20555

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

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

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

VALUE/IMPACT STATEMENT

A draft value/impact statement was published with the proposed version of this regulatory guide, Task FC 409-4, when the draft guide was published for public comment in April 1985. No substantive changes were necessary, so a separate value/impact statement for the final guide has not been prepared. A copy of the draft value/impact statement is available for inspection or copying for a fee at the Commission's Public Document Room at 1717 H Street NW., Washington, DC 20555, under Task FC 409-4.

*U.S. GOVERNMENT PRINTING OFFICE:1987-202-292:60319

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WASHINGTON, D.C. 20555

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