NEW YORK STATE DEPARTMENT OF HEALTH BUREAU OF ENVIRONMENTAL RADIATION PROTECTION INDUSTRIAL UNIT



Radiation Guide 1.3

GUIDE AND APPLICATION FOR LICENSES TO USE SEALED SOURCES IN MEASURING, GAUGING, CONTROLLING DEVICES (GAUGES), AT FIXED LOCATIONS AND BENCH TOP X-RAY FLUORESCENCE ANALYZERS

A. Purpose of Guide/Application

This guide describes procedures for use and control over devices which contain radioactive sources. Licenses are required for all such devices in order to properly control them, and to ensure that they are accounted for at all times and properly disposed of when no longer needed.

This guide describes a radioactive device control program which an applicant may adopt by signing the application page 6. The signed guide then becomes your application and should be mailed to the address below, along with a check in the amount of \$3,000, made out to the **Department of Health**. This fee will be payable every three years upon license renewal.

You should keep a copy of the signed guide/application, and provide a copy to your radiation safety officer. You and your radiation safety officer will be responsible for ensuring that the radiation protection program described in the guide/application is implemented.

When your application is approved, you will receive a license containing numbered paragraphs, or "license conditions." These will repeat the requirements of this guide, and state some additional limitations and requirements to make sure radioactive devices are used safely. You must ensure that your radiation safety officer enforces these requirements.

Your premises will be inspected periodically by a representative of this office to assess compliance with requirements, and to recommend possible improvements to your program.

B. Policies and Procedures

- 1. **Radiation Safety Officer**. You must designate someone in your company to oversee your radiation protection program and be responsible to you for its implementation. This person's name and telephone number must be entered on line 5 of the application page (page 6). If this person leaves your company you must notify us promptly and designate a new Radiation Safety Officer.
- 2. Appendix I to this guide/application contains an explanation of the requirements, or license conditions, that will be a part of your license when it is issued. A sample license is enclosed so that you can review it along with the explanation.
 - Your signature on the application page constitutes a commitment to comply with those requirements. You and your radiation safety officer should review these requirements to be sure that you understand them, and plan for their implementation.
- 3. Once your license is issued, you may obtain any radioactive device for use at a fixed location, which is authorized for distribution to general or specific licensees by an Agreement State or the U.S. NRC, without prior approval from this office.
- 4. You must <u>submit</u> to this office an accurate annual inventory of all devices possessed under the license (see the explanation of license condition (19) for details).

- 5. You must <u>perform</u>, or have performed, certain tests and checks on devices (see the explanation of license conditions (17) and (18) for details). The required "leak test" sample must be analyzed by a person or company licensed by the USNRC or a state to perform such analysis.
- 6. Under this license you are <u>not</u> authorized to install, remove or reinstall devices.

If you want authorization to remove or reinstall devices, you must have access to a properly calibrated survey meter, and make surveys of devices to ensure that the shutter is closed before handling the device. The shutter must be locked in the closed position before surveying or handling the device.

You should <u>contact</u> this office to have your license modified to allow these activities. At that time you will be required to submit the make and model of the survey meter that will be used, the training of the person(s) who will perform the surveys and the arrangements you will make to have the meter calibrated annually.

7. Emergency Procedures. Employees must be instructed in the actions to take if they observe a problem with a device. Any apparent malfunctions or radiation exposure to individuals <u>must</u> be reported to this office (see also the explanation of license conditions 21 and 22) by telephone, at the following numbers:

Daytime: (518) 402-7550

After-hours: (518) 292-2200 (State Warning Point)

C. Submitting Your Application

After reading this guide and reviewing all requirements, you should sign the Application Page (last page), and make copies of the entire guide and application for your records.

The signed original should be mailed to the address below, along with a check for \$3,000 made out to the Department of Health. You will receive your license within ten (10) days of our receipt of your application.

MAILING ADDRESS: State of New York Department of Health

Bureau of Environmental Radiation Protection

Industrial Unit 547 River Street

Troy, New York 12180-2216

APPENDIX I EXPLANATION OF LICENSE CONDITIONS

- 1. This is your company name
- 2. This is the address at which your company's radioactive sources are located.
- 3. This is your license number.
- 4. This is the license expiration date. You must renew the license every three years.
- 5. a. and b.: These are numbers that we use to identify renewals and amendments of your license.
- 6, 7, 8 & 9. These conditions authorize you to receive any source and device which you need once the license is issued.
- 10. The license only authorizes possession of sources and devices at the location in Condition 2. If you want to install devices at another company location you <u>must</u> first apply for a separate license for that location.
- 11. You must designate a person to be responsible for the safe use of your company's sources and devices (the Radiation Safety Officer).
- 12. Each device that you receive will be labeled in accordance with the provisions of a U.S. NRC or state license which authorizes the distribution of the devices. You must ensure that these labels are maintained in legible condition and replaced as necessary.
- 13. Each device must be installed on your premises by a person authorized to install such devices under a license or permit issued to the installer by the U.S. NRC, or any Agreement State, if a label affixed to the device at the time of receipt states that such installation is required. This requirement does not apply while devices are held in storage in the original shipping containers pending installation.
- 14. You must obtain all devices from a vendor who agrees to accept the radioactive sources back when they are no longer needed. A fee is likely to be charged for this service.
- 15. You cannot dispose of any device except by transfer to a person who holds a license or permit issued by the U.S. NRC or a State to receive it. In case the device is to remain in use at a particular location under new ownership, you must first contact the Department.
- 16. You must assure that all labels attached to the devices, bearing the statement "Removal of This Label is Prohibited", are maintained on the devices. You must also comply with all instructions contained in such labels, and with all other instructions supplied by the manufacturer or distributor for use or maintenance of the devices, and you may not alter a device or its' shielding or remove the source holder from the device.

- 17. Devices must be tested periodically to ensure that the radioactive source is intact and not "leaking." The device must come with a leak test certificate stating that it meets requirements. It will also come with information and/or a label stating how often it must be leak-tested while you have it. It is your responsibility to see that these tests are done.
- 18. You must be sure to have the on/off mechanisms and indicators (if any) tested for proper operation at the time the device is installed. These tests must also be repeated after any radioactive source replacements, and after any repair or service to a device.
- 19. You must maintain an accurate, current inventory of all devices acquired under the license. An inventory must be conducted at intervals not to exceed six months and list the make, model and serial number of each device, its location, leak test interval and the date of the last leak test. Newly acquired devices must be added to the inventory as soon as they are received, and you must maintain permanent records of all radioactive sources removed from your premises.

If you are unable to locate a radioactive source at the time of inventory (or at any other time), you must notify this office immediately by telephone.

Every year, between January 1 and January 31, you must <u>submit</u> a copy of your current inventory to this office.

- 20. All tests or servicing of devices must be done by a person who holds a license authorizing him or her to manufacture, install or service devices of that make and model.
- 21. If you or your staff observe any failure of an on/off mechanism or indicator, or damage to the shielding or housing of the radioactive source, you must notify this office immediately and suspend use of the device.
- 22. You must report loss of control of any source or device immediately to this office.
- 23. Devices that are not being used, whether remaining mounted in place or put into storage, must be labeled with a Department-supplied label warning against improper disposal. Unused devices should be disposed of as soon as possible to reduce the likelihood of loss of control.
- 24. You and your staff are <u>not</u> authorized to install, remove or reinstall devices, except as provided for in the Sealed Source & Device Registry sheet for each device.

APPLICATION PAGE

1.	Name and address of company:				
2.	FEIN #:				
3.	Telephone number of company management	anagement:			
4.	Fixed locations where radioactive devices will be used if different from address in item 1:				
5.	Name and telephone number of person to be contacted about application (Radiation Safety Officer):				
	NAME (Please print)	TELEPHO	NE NUMBER		
6.	List all devices, include: quantity, manufacturer, model and serial number of each device, isotope and activity of source in each device and purpose or use. Please use additional sheets to list all devices.				
7.	Workers' Compensation and Disability shows DOH as "certificate holder" to be notified if insurance is cancelled (see enclosed forms).				
8.	Name and telephone number of person to be contacted about application (Radiation Safety Officer):				
	NAME (Please print)	TELEPHO	NE NUMBER		
9.	Certification (to be signed by the chief executive officer of the legal entity applying for the license):				
	"I certify that all information contained in this application is true and correct to the best of my knowledge, and that all policies and procedures described herein will be implemented."				
		Signature of Certifying Of (Plant Manager, Company	ficial President, Agency Head, etc.)		
— NAN	ME (Please print)	TITLE	DATE		

ADDITIONAL DOCUMENTS TO BE SUBMITTED

In addition to the foregoing, you must also submit:

- 1. In-state applicants must send a copy of a letter sent to the Police Department in each permanent use location listed in item 2 of the application, which informs them that radioactive materials will be on the premises and instructs them on any precautions to be taken and notifications to be made in the event of a fire or emergency.
- 2. In-state applicants must send a copy of a letter sent to the Fire Department in each permanent use location listed in item 2 of the application, which informs them that radioactive materials will be on the premises and includes a completed Hazardous Materials Form (F100965-001), and instructs them in any precautions to be taken and notifications to be made in the event of a fire or emergency.
- 3. All applicants must provide proof that you have obtained the required Workers' Compensation and Disability Benefits coverage, or that you are not required to provide coverage under Section 57 of the Workers' Compensation Law and Section 220, subdivision 8 of the Disability Benefits Law. Such proof must be current at the time of license application.
- 4. Out-of-state applicants must submit a copy of their radioactive materials license issued by the U.S. Nuclear Regulatory Commission or an Agreement State.

SAMPLE

			1234-5678		
SMIT	Н МА	NUFACTURING COMPANY			
			MAY 31, 2002		
ANY	PLAC	E, New York State			
A. Aı	ny	A. Sealed Sources (See Condition 9.A.)	A. See Condition 9.B.		
9.	Auth	orized use:			
	A.	The licensee is authorized to acquire and use any sealed source contained in a measuring, gauging or controlling device (gauge), which is authorized for distribution to specific or general licensees in a license issued by an Agreement State, a licensing State or the U.S. Nuclear Regulatory Commission. Combinations of sources and devices shall be compatible for use as stated in a Sealed Source and Device Registration Certificate, and devices shall only be used for the purposes specified in the Registration Certificate.			
	В.	No source may exceed the maximum activity specified Source and Device Registration Certificate for any debe used.			
10.	Licer Licer	ensed material shall only be used at licensee Installation specified in Condition 2. of this ense.			
11.	Safet overs	Licensed material shall be used by, or under the supervision of, (Radiatio Safety Officer). If this person leaves your employ or discontinues responsibility for overseeing your radiation protection program you must contact the Department within thirt days and designate a new Radiation Safety Officer.			

maintained in legible condition and replaced as necessary.

12.

Each device must be labeled in accordance with the provisions of a U.S. NRC or Agreement

State license which authorizes the distribution of the devices. These labels must be

- 13. Each device must be installed on the premises of the licensee by a person authorized to install such devices under a license or permit issued to the installer by the U.S. NRC, or any Agreement State, if a label affixed to the device at the time of receipt states that such installation is required. This requirement does not apply while devices are held in storage in the original shipping containers pending installation.
- 14. All radioactive sources must be obtained from a vendor who will give you a commitment to accept all sources back when you no longer need them.
- 15. The licensee shall not dispose of any such device except by transfer to a person who holds a license or permit issued by the U.S. NRC or an Agreement State to receive it. In case the device is to remain in use at a particular location under new ownership, the licensee shall first contact the Department.
- 16. Α. The licensee shall assure that all labels affixed to the devices bearing the statement "Removal of This Label is Prohibited" are maintained on the devices, and shall comply with all instructions contained in such labels and with all other instructions supplied by the manufacturer or distributor.
 - B. The licensee shall not alter a device in any way, remove the source or source holder from the device, nor alter the device shielding in any way.
- 17. The licensee shall cause the device to be tested for leakage of radioactive material at the time of installation of the device or replacement of the radioactive material, and thereafter at intervals that do not exceed six months, or at such longer intervals, not to exceed three years, as specified by the appropriate licensing agency and indicated in the required label; except that any such device containing only Krypton 85 need not be tested for leakage, and devices containing only Hydrogen 3 need not be so tested for any purpose.
- 18. The licensee shall cause each device to be tested for proper operation of the on-off mechanism and indicator, if any, at the time of installation, after replacement of the radioactive material, and after any repair or servicing of the device.
- 19. A. The licensee shall conduct, or have conducted, a periodic inventory of all devices possessed under this license. Such inventory shall be conducted at intervals not to exceed six months and shall be documented in a record containing the identity of each device (make, model and serial number), the radionuclide and activity in the source, its location, whether it is in active use, date of last leak test of the device, and the identity of the person who performed the inventory.
- 3. License Number XXXX-XXXX
- 5a. Ref. No. X
- b. Amend. No. -X-

- B. On an annual basis, between January 1, and January 31 of each year, the licensee shall <u>submit</u> an accurate inventory of all devices to the Department. Any discrepancies between one year's inventory and the next must be accounted for by supplying documentation of legal disposal of any deleted devices.
- 20. The licensee shall cause each required test and all other servicing involving such radioactive material, its shielding or containment, to be conducted as specified in the instructions provided by the device labels (or otherwise provided by the supplier), or by a person who holds a license which authorizes him/her to manufacture, install or service the device.
- 21. Upon any indication of a possible failure of, or damage to the shielding or containment of the radioactive source, or an on-off mechanism or indicator, the licensee shall immediately notify the Department by telephone and shall suspend use of such device.
- 22. The licensee shall report immediately by telephone, the loss of control of any radioactive source or device. This includes inability to locate a source or device on your premises, or failure of a source or device to arrive at a destination to which you have shipped it, at the expected time.
- 23. Sources in devices which are no longer useful to the licensee shall be promptly transferred to a licensed recipient for use, recycling or disposal.
- 24. This license does not authorize licensee installation, removal or reinstallation of devices, except as provided for in the Sealed Source & Device Registry Sheet for each gauge.

New York State Department of Health

DATE: XXX:xxx by: Clayton J. Bradt, CHP Principal Radiophysicist