



Texas Department of State Health Services Radiation Safety Licensing Branch

Regulatory Guide 2.18

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Guide for the Preparation of Radioactive Material License Applications for Decontamination Services

I. INTRODUCTION

A. Licensing Process

The acquisition, possession, use, manufacture, production, transport, transfer, and processing of radioactive material in Texas shall be authorized by the Texas Department of State Health Services (DSHS), Radiation Safety Licensing Branch. The branch issues such authorization as a license. A license indicates what type, quantity, form, and use of radioactive material is authorized and any special conditions under which the radioactive material shall be used. This guide describes the process for application for a license and for amendment, renewal, and termination of a license.

B. DSHS Contacts

The DSHS radiation control program maintains an Internet site. The site contains the rules and forms referenced in this regulatory guide, as well as information on who to contact at DSHS with questions, information on the activities and structure of the department, topics of interest about radiation, and links to other radiation-related web sites.

The DSHS Internet site is located at: <http://www.dshs.state.tx.us/radiation>

If you do not have access to the world-wide web and need additional information, please call (512) 834-6688 and ask for the following:

Industrial Licensing Program - for questions regarding the regulation of Decontamination Services and the application for a radioactive material license and any related correspondence.

Regulatory Guides are issued to assist applicants and licensees/registrants in developing operational procedures acceptable to the Department of State Health Services, Radiation Safety Licensing Branch (department), that are compliant with specific sections of Title 25 Texas Administrative Code Chapter 289. Regulatory Guides are NOT substitutes for regulations and compliance with them is not required. Methods for compliance with regulations different from those set out in guides will be acceptable if they are considered by department staff to provide for public health and safety and demonstrate compliance with regulations.

Comments and suggestions for improvements in Regulatory Guides are encouraged. Letters containing comments and suggestions should be sent to the Department of State Health Services, Attn: Manager, Radioactive Material Licensing – MC 2835, P.O. Box 149347, Austin, Texas 78714-9347. Regulatory guides may be reproduced or may be obtained by contacting the department at (512) 834-6688 or accessing our web page at www.dshs.state.tx.us/radiation

II. APPLICABLE REGULATIONS

- A. The requirements of the following sections of Title 25, Texas Administrative Code (TAC), Chapter 289, apply to the use of radioactive material in Decontamination Service operations:

- §289.201 “General Provisions for Radioactive Material”
- §289.202 “Standards for Protection Against Radiation from Radioactive Material”
- §289.203 “Notices, Instructions, and Reports to Workers; Inspections”
- §289.204 “Fees for Certificates of Registration, Radioactive Material Licenses, Emergency Planning and Implementation, and Other Regulatory Services”
- §289.205 “Hearing and Enforcement Procedures”
- §289.251 “Exemptions, General Licenses, and General License Acknowledgements”
- §289.252 “Licensing of Radioactive Material”
- §289.257 “Packaging and Transportation of Radioactive Material”
- §289.259 “Licensing of Naturally Occurring Radioactive Material”

- B. It is the licensee's responsibility to ensure that its facility and any additional authorized sites are provided with copies of the applicable rules. These rules may be downloaded from the DSHS Internet site. If you do not have access to the world-wide web you may request one copy of the applicable rules. For a charge, you may request rules on disk or more than one hard copy of the rules.

III. FILING AN APPLICATION

A. GENERAL

25 TAC, Chapter 289, this guide, forms, and other guidance documents are available on the DSHS Internet site: <http://www.dshs.state.tx.us/radiation>. Each applicant must submit the following forms in duplicate:

- **RC Form 252-1 (Business Information Form)**

Applicants must sign and submit, in duplicate, a completed Business Information Form, including a certification statement of financial qualification to conduct the requested activity, including any decontamination, decommissioning, reclamation and disposal [25 TAC §289.251(ii)(8)].

- **RC Form 252-2 (Application for Radioactive Materials License)**

Space provided on the application form is limited, so 8.5” x 11” paper should be used to append additional pages. Each page submitted with the application should be identified and keyed to the item number on RC Form 252-2 to which it applies. Two copies of the application and all attachments must be submitted, with another copy retained by the applicant. All application items must be addressed in sufficient detail to demonstrate that equipment, facilities, personnel qualifications and procedures are adequate to protect public health and safety or property.

III. **FILING AN APPLICATION**

B. **LICENSE FEES**

- **New Application**

A fee must be submitted with each new application. Note there are different fees for fixed and mobile decontamination licenses. Refer to §289.204 to determine the fee that should accompany the application. Each additional storage site will add 25% to the base license application fee. You may contact the accounting office at (512) 834-6688 to verify the total application fee required. An additional non-refundable fee, equaling 5% of the specified fee, may be required for deposit into the Radiation and Perpetual Care Account. Please ask if this additional fee is being collected. Review of the application will not begin until the proper fee is received by the DSHS. The check or money order should be made payable to the Department of State Health Services.

Mail the completed new license application and the required license fee to:

Texas Department of State Health Services
Radioactive Material Licensing – MC 2003
P.O. Box 149347
Austin, Texas 78714-9347

- **Biannual Fee**

Once a license has been issued, a nonrefundable fee must be paid biannually for each radioactive material license. The fee must be paid in full for 2 years on or before the last day of the expiration month of the license. For example, if the license expires September 30, 2021, the biannual fees are due on or before September 30 of each odd-numbered calendar year. You will receive a bill from the DSHS for your biannual fee approximately 60 days prior to the fee due date.

Electronic payments of RENEWAL fees are accepted and may be made with a credit card or electronic check via Texas Online, <http://texasonline.com>, or mailed using the payment coupon and envelope included with the bill.

- **License Renewal or Amendment**

Do not submit a fee with the request for renewal or amendment. If an amendment changes or adds a category of license or adds an additional authorized use site, the biannual fee will be adjusted accordingly. The adjustments will be reflected on your next fee bill.

The department maintains a separate address for regular correspondence. Submit your license renewal or amendment request to the following address:

Texas Department of State Health Services
Radioactive Material Licensing – MC 2835
P.O. Box 149347
Austin, Texas 78714-9347

III. FILING AN APPLICATION

C. COMPLETING THE APPLICATION

1. Submit RC Form 252-2, "Application for Radioactive Material License," for Decontamination Services.
2. Complete all items on the application in sufficient detail to allow the license reviewers to make a complete evaluation of the program for Decontamination Services.
3. Submit two copies of the application and all attachments and retain a copy for your records.
4. Complete Items 1-15 on the application.
5. Additional sheets will be necessary to submit all of the information in items 8-15 of the application. Identify each separate sheet or document submitted with the application by referencing the application item number to which it refers.
6. Submit all documentation, including pages, sketches, and drawings, on 8-1/2 x 11 inch paper to ease handling and review. If larger drawings are necessary, they should be folded to 8-1/2 x 11 inches.

IV. CONTENTS OF AN APPLICATION

This section provides instructions on completing each item listed in RC Form 252-2, "Application for a Radioactive Materials License."

Item 1 – LEGAL BUSINESS NAME AND MAILING ADDRESS OF APPLICANT

List the name, a state of Texas mailing address, and telephone number of the individual or company to whom the license will be issued. If available, please include an e-mail address and fax number. Also complete and submit RC Form 252-1, "Business Information Form," available from the department's website.

An applicant entity must be registered with the Texas Secretary of State's Corporations Section. If an assumed name is to be included, it will be identified as the name the applicant is doing business as (DBA) and must also be registered. For example, "ABC Corporation DBA ABC Enterprises of Texas." Business registration should be verified by contacting the Texas Secretary of State's Corporations Section at (512) 475-2755 or on the Internet at <http://www.sos.state.tx.us/corp/sosda/index.shtml>.

If the applicant is an individual, the individual should be acting in a private capacity, and the use of the radioactive material should not be connected with the individual's employment with a corporation or other legal entity.

Item 2 - LOCATIONS WHERE RADIOACTIVE MATERIAL WILL BE USED

Note there are different fees for fixed and mobile decontamination licenses, Indicate if Mobile Decontamination Services will be performed at temporary jobsites throughout Texas. Or, indicate if the license is for fixed site services by specifying all permanent use and/or storage locations by the street address, city, and state, or provide a descriptive address (e.g., 5 miles E of FM Road 14 on Texas Highway 10, Anytown, Texas). A post office box address is not acceptable in Item 2. Note: The number of authorized sites will affect the amount of license fee. Each additional storage and/or records location will add 25% to the base license fee.

IV. CONTENTS OF AN APPLICATION

Item 3 – THIS IS APPLICATION FOR

Identify if the application is for a new license or renewal of an existing license. If the application is for renewal of a license, provide the existing license number. If a previous license was or is currently held from Texas or another jurisdiction, include that information.

Item 4 - LOCATION WHERE RECORDS WILL BE KEPT

This is the location in Texas that will be listed on the license as the main site and the site to which all correspondence is mailed unless a post office box service is maintained. The main site is the site where the Radiation Safety Officer is routinely available and can receive correspondence without delay; and where copies of records for the entire license are maintained for inspection by the department (except for some sub-site utilization records). Provide the physical address of the site to be designated as the main site.

Item 5 - INDIVIDUAL USERS AND THEIR TITLES

List the names and titles of the individuals who will be Site Supervisors. Documentation of their training and experience must be submitted. The Radiation Safety Officer (RSO) shall designate other users based on training as indicated in Item 12.

Item 6 - RADIATION SAFETY OFFICER (RSO)

The RSO is the person designated to be responsible for the day-to-day radiation safety program. The RSO maintains all records required by department rules, and is the primary contact with the department on matters pertaining to the license and the use of radioactive materials. The RSO must have the authority to enforce radiation safety policy, suspend activities deemed unsafe, and require remedial action when necessary. Submit the following information concerning the RSO:

- The RSO's educational background and specific training and experience with radioactive materials in the field of radiation safety. Two years as a Field Site Supervisor over decontamination services or equivalent experience is required.
- Indicate the name of the RSO and telephone number(s), FAX number(s), and electronic mail address(es) where the RSO may be contacted.
- If multiple sites are requested, indicate the name(s) and qualifications (same as above) of the Site RSO and the telephone number(s) for each site.

Item 7 – RADIOACTIVE MATERIALS DATA

7a. Indicate isotopes as NORM or a range by atomic number, for example 3 to 83.

7b. Identify material form such as “Solid, Sludge or Liquid.”

7c. For Mobile sites request “as needed for each job.” For fixed sites indicate total activity requested in curies. Note that the total activity affects the amount of financial assurance required for a fixed facility.

7d. Examples: Decontamination of NORM contaminated pipe, land, buildings, equipment and materials or Decontamination of pipe, land, buildings, equipment and materials contaminated with radioactive materials

IV. CONTENTS OF AN APPLICATION

Item 8 – FACILITIES

1. If the license application is for mobile decontamination services only then no facility documentation is required.
2. For a fixed decontamination facility provide a description of the facility including the following:
 - a. Provide a description (e.g., drawing) of the facility showing the facility design and dimensions and the location of the work area(s) and equipment used in the decontamination activities. Indicate restricted and unrestricted areas.
 - b. If decontamination activities are conducted in an enclosed area (i.e., building) provide a description of the area and details of the ventilation system for that area.
 - c. Describe any equipment (e.g. containment system, spray system, retention tanks, storage facilities, etc.) proposed for use during the decontamination activities
 - d. Indicate the nature of the adjacent properties and the distance of the proposed facility structure(s) to the property line and adjacent businesses or residences. The site description must also indicate the location of and distance from creeks and drainages.
 - e. Identify the impervious surface used in work areas and describe the soil types under the facility with respect to compatibility with foundation and structural design.
 - f. The applicant should provide evidence that the proposed facility is not located in the recharge area of a sole source aquifer or a major aquifer. A letter or a map from the TCEQ is satisfactory documentation.
 - g. Specify the maximum volume and activity of radioactive material that can be stored in the proposed facility.
 - h. Provide a description of the equipment to be installed to maintain control over radioactive materials in gaseous and liquid effluents and the means used to prevent radioactive materials levels in unrestricted areas below the limits prescribed in 25 TAC ' 289.202. Additionally describe how the facility is designed to confine spills.
 - i. Indicate security precautions to be taken to prevent theft or unauthorized use of the radioactive materials.
 - j. Describe radiological posting used at the site.
 - j. Provide dose assessment measurements for workers and members of the public to show compliance with the public dose limits and As Low As Reasonably Achievable (ALARA).
3. Identify the owner of the proposed storage facility. If the facility is owned by another entity, provide a letter from the owner or the owner's agent, acknowledging that they are aware that you are performing radioactive material decontamination services on the property.

IV. CONTENTS OF AN APPLICATION

Item 9 - OPERATING, SAFETY, AND EMERGENCY PROCEDURES

Include a copy of your Operating and Emergency Procedures Manual (Manual). The purpose of operating, safety, and emergency procedures is to provide personnel with clear and specific guidance and instructions for the use of radioactive material. The Manual should include, but not be limited to the following topics:

1. Management Structure and Its Responsibilities Provide a description of the management structure, and the RSO's position in that structure. Describe the applicant's position on radiation

safety in relation to the work environment, to include specifically a commitment to the principle of ALARA (As Low As Reasonably Achievable).

IV. CONTENTS OF AN APPLICATION

Item 9 - OPERATING, SAFETY, AND EMERGENCY PROCEDURES (continued)

2. Radiation Safety Officer Duties Explain the RSO's duties in the company with emphasis on overseeing the radiation safety program. Describe records of administration, radiation surveys, periodic field inspections, etc. that will be maintained by the RSO. You may refer to §289.252(f)(3) for a listing of the minimum duties to be completed by the RSO.
3. Users Duties Explain the duties and responsibilities of other users such as technicians, site supervisors, or other levels of radiation worker that may be designated by your operating procedures and program.
4. Training the Manual should state if an outside training service will be used. If the licensee provides their own training they should include:
 - a. a course outline of the training for each level of user including topics and the amount of time spent on each topic and the total amount of classroom and on-the-job training,
 - b. list books or reference materials used in the course,
 - c. list equipment used or demonstrated,
 - d. state who will perform the training and give their qualifications,
 - e. submit an example examination, answer key and passing grade requirement, and
 - f. include refresher training if applicable.
5. Individual Monitoring Devices Individual personnel monitoring devices must be supplied to and worn by occupational workers likely to exceed 500 millirem in one year. Refer to §289.202(q)(1) for additional monitoring requirements for minors, declared pregnant women, or occupational workers entering a high or very high radiation area. Individual monitoring devices shall meet the requirements of §289.202(p)(3).
6. Bioassays Individuals who are expected to exceed 10% of the Annual Limits on Intake (ALI) or who exceed the Derived Air Concentrations (DAC) will need to be monitored for internal dose by use of bioassays such as urinalysis. Describe who if any persons will participate in the bioassay program and describe the program.
7. Routine Operating Procedures Describe routine operating procedures that employees must follow when performing decontamination. The procedures should address the following topics if they are appropriate to your operations.
 - a. The establishment of restricted areas and access control procedures used. Describe the equipment and criteria used to define a restricted area and how access to the restricted area is controlled including the types of barriers and posting that will be used. Describe who controls access and how they release personnel and equipment.
 - b. The establishment of radiation areas and contamination control areas should also be addressed.
 - c. Describe radiation surveys taken at the job site including those taken in the above areas. Describe release surveys for personnel, equipment and the site at the completion of a job. Soil and water release procedures should be included as appropriate.
 - d. Address airborne monitoring conducted at job sites to ensure that workers are not exposed to air concentrations above the DAC limits or are exposed internally in excess of the ALI. Describe the equipment used to take the air samples, procedures used to ensure that air samples are taken in the workers breathing zone, and procedures to count the air samples.
 - e. Describe the Personal Protective Equipment (PPE) used while conducting decontamination activities. If there is more than one level of equipment used describe each and when they are appropriate. Also include step-by-step donning and doffing procedures for each level of PPE.

IV. CONTENTS OF AN APPLICATION

Item 9 - OPERATING, SAFETY, AND EMERGENCY PROCEDURES (continued)

- f. The applicant's respiratory protection program should be included and should address the types of respiratory protection used with each level of PPE.
 - g. Describe the types of facilities where decontamination will occur and the type of equipment that will be decontaminated. Include procedures for performing decontamination with each type of tool used such as anything from scrapers to hydroblasting as required for the job.
 - h. For more complex operations include process procedures such as for project planning and radiation work permits as appropriate to the level of work.
 - i. Include waste management procedures describing how waste will be handled. Include information on packaging, labeling, shipping, and hazmat shipping training as appropriate. If material is left on site describe the how it will be contained.
8. Emergency Procedures. Describe the actions to be taken by users of material when emergency situations involving radioactive material occur. Also, describe the actions to be taken by the RSO. The following types of emergencies should be addressed as appropriate to the work being performed.
- a. spill response procedures,
 - b. personnel contamination and decontamination procedures,
 - c. loss or theft of radioactive material,
 - d. overexposure to workers,
 - e. loss or damage to individual monitoring devices,
 - f. transportation accidents, and
 - g. fire or natural disasters.
9. Fixed Site Facility Monitoring If the applicant intends to have a fixed facility describe the routine monitoring of the site to include radiation surveys, air, water and soil sampling and dose measurements at the boundary. Include the monitoring frequency for each type.
10. Recordkeeping. Provide a description of all records that will be maintained to document operations involving the use of radioactive material. Records should include, but not be limited to: Receipt, transfer, and disposal; Leak tests; Utilization logs; Individual monitoring reports (if applicable); Training, and Annual Audits and Work Site Audits.

Item 10 - RADIATION DETECTION INSTRUMENTATION

Provide information on the type of radiation detection equipment that will be used. For example the minimum equipment needed for mobile NORM decontamination is a microR meter, a contamination survey meter (e.g. pancake probe), and an air sampler, if airborne activity is possible. Specify the calibration interval, which is not to exceed one year. If a commercial service is to be used to calibrate survey instruments include a statement in the manual that instrument calibrations will be performed by a person licensed by the agency, the NRC or another Agreement State.

Item 11 - LEAK TESTING

If no sealed sources are possessed, mark this section as not applicable. If sealed sources will be possessed, such as calibration and reference sources, they must be leak tested every six months. Describe the method to be used for leak testing, such as a commercial leak test service licensed by the agency, the NRC or another Agreement State.

IV. CONTENTS OF AN APPLICATION (continued)

Item 12 - TRAINING AND EXPERIENCE

The applicants training program must be outlined in the manual and the amount of training must be commensurate to a person's job duties. Basic radiation safety training for decontamination service workers generally consists of 8-12 hours of classroom and 4-6 hours of on-the-job radiation safety training. Site Supervisors are expected to have training and experience similar to that of an RSO, perhaps with less supervisory experience.

Item 13 - WASTE DISPOSAL

The applicant must describe how the radioactive material will be disposed of when a decontamination job is completed. For mobile decontamination the waste must either be left at the customer's site for later disposal or prepared for shipment and shipped to a waste broker or disposal facility. A fixed site may have additional options. Waste management procedures should be included in the applicant's manual. All records of receipt, transfer, and disposal as well as all survey records shall be retained for DSHS inspection.

Item 14 - FINANCIAL QUALIFICATION AND FINANCIAL ASSURANCE

1. Mobile decontamination services are not required to provide financial assurance, since they do not remain in possession of the material when a job is completed. Mark the first box at the bottom of page 1 on the business information form.
2. Fixed decontamination service facilities will in most cases have to supply financial assurance. The applicant will need to submit a decommissioning funding plan (DFP) and cost estimate for decommissioning the site. Please request additional guidance on the preparation of the DFP and cost estimate. Once the DFP and cost estimate is accepted the applicant will receive additional guidance on submitting financial assurance.

Item 15 – CERTIFICATION

The application must be dated and signed by a representative of the corporation or other 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 the applicant's knowledge. All unsigned applications will be returned for proper signature.

Submit a completed RC Form 252-1 (Business Information Form) with the application.

Mail the completed application, all attachments and the new license application fee to:

Texas Department of State Health Services
Radioactive Material Licensing – MC 2003
P.O. Box 149347
Austin, Texas 78714-9347

V. LICENSE RENEWAL

Absent any actions by the department or the licensee, a license remains in effect for ten years. An application for license renewal must be received by the department. This filing will ensure that the license does not expire until final action on the application has been taken. Because of advances in radiation safety techniques, changes in operations during the term of the license and DSHS rule changes, a complete renewal application must be submitted like the original application. For personnel added since the license was issued, a statement must confirm that the training and experience of new workers is in accordance with Item 12 of the application. If the application has made any changes in the training program, address those changes in Item 12 of the application. DSHS should be contacted directly for assistance in answering questions concerning the renewal and the procedure for addressing specific items.

Submit a completed RC Form 252-1 (Business Information Form) with the application.

Mail the completed application and all attachments to:

Texas Department of State Health Services
Radioactive Material Licensing – MC 2835
P.O. Box 149347
Austin, Texas 78714-9347

VI. LICENSE AMENDMENT OR TERMINATION

A. AMENDMENT

1. Submit an amendment request by letter, rather than on an application form. Always reference your license number when corresponding with DSHS. Amendments submitted on an application form may cause a processing delay.
2. Specify exactly what you want changed on the license. Always furnish a justification for the request.
3. Plan ahead whenever possible. For instance, if you have placed a bid on a job and know that an amendment to the license will be required (i.e., new storage/use location, additional radioactive material, etc.), forward your request for amendment to DSHS immediately. **PLEASE DO NOT WAIT** until after you are awarded the contract to request an amendment.
4. Send your amendment to the Industrial Licensing Program at the following address: Texas Department of State Health Services, Radioactive Material Licensing – MC 2835, P.O. Box 149347, Austin, Texas 78714-9347.
5. You will receive your license amendment by mail.
6. Always submit the request in duplicate, including attachments. For licensees with more than one permanent use/storage facility listed on the license or for amendment requests, you may be asked to submit more than two copies of your request. If you are asked to submit several additional copies of the request to the department, it would be advantageous to always submit that requested number of copies with future amendment requests.
7. Send routine amendment requests separately from amendment requests that are more complex. For example, if you are changing RSO and also need to release a permanent storage/use facility for unrestricted use, you should submit each request in separate letters. Many times DSHS will perform a confirming close-out survey of your facilities before they are authorized to be released for unrestricted use. This will cause a delay in processing the requested RSO change.

VI. LICENSE AMENDMENT OR TERMINATION

A. AMENDMENT (continued)

8. If you have a license and a certificate of registration (an authorization for the use of X-Ray Machines) or multiples of either, always submit the changes that affect the radioactive material license to the Industrial Licensing Program and changes that affect the certificate of registration to the Industrial Registration Program. Submit changes that affect both documents to each program as separate requests.
9. When requesting the relocation of a permanent storage/use facility, note that the new facility must be authorized on the license before relocation can occur. After the amendment is issued and you have relocated to your new facility it is important that you submit a request to terminate the former facility. This request should be accompanied by a close-out radiation survey [§289.202(ccc)].
10. The department will accept most facsimile transmissions and signed electronic mail attachments as formal requests for amendment. The fax number is (512) 834-6690. Please limit facsimiles to no more than ten pages. Originals do **NOT** need to be sent regular mail if submitted by fax or email.

B. TERMINATION

1. To terminate your license, the department requires the following.
 - a. Request should specify that you want to **terminate** the license.
 - b. Copies of surveys required by §289.202(p), if applicable.
 - c. All fees shall be paid/current. Not paying your biannual fee does **NOT** automatically terminate your license.
 - d. Documentation of radioactive material disposition and radiation surveys required by §289.252(l)(4)(C).
 - e. All Notices of Violation shall be resolved through the DSHS Policy/Standards/Quality Assurance's Radiation Group.
2. DSHS reserves the right to conduct a confirming radiation survey and facility evaluation prior to the release of controlled areas for unrestricted use. It is the licensee's responsibility to decontaminate facilities to levels allowing release for unrestricted use. If residual radiation levels or contamination levels exceed the applicable release limits contained in §289.202, your license will not be terminated until release limits have been met.

Mail the license amendment or termination requests and any attachments to:

Texas Department of State Health Services
Radioactive Material Licensing – MC 2835
P.O. Box 149347
Austin, Texas 78714-9347

You may also fax the license amendment or termination request to:

(512) 834-6690