

TENNESSEE DEPARTMENT OF HEALTH AND ENVIRONMENT
DIVISION OF RADIOLOGICAL HEALTH

INSTRUCTIONS FOR PREPARING APPLICATION FOR CERTIFIED REGISTRATION
FORM RHS 8-8

FOR MEDICAL FACILITIES ONLY

An applicant for a Certified Registration to use an accelerator must complete Form RHS 8-8 and must attach to the completed form the additional information indicated. An original and one (1) copy of the entire application package are to be provided to the Division for review.

Item 1.

- (a) Identify the legal entity in whose name the Certified Registration should be issued and who is to be legally responsible for the use of the accelerator.

- (b) Check appropriate block indicating organizational structure of applicant.

Item 2. List any previous Certified Registrations by number. If the application is for renewal or amendment of an existing Certified Registration, the Certified Registration number should be included and the word "renewal" or "amendment" inserted.

Item 3. List all locations at which the accelerator will be used. The name and location at which the accelerator will be used on a permanent basis should be identified by street address, city and state.

Item 4. List the information indicated in the heading of the column for each accelerator to be used. Follow the alphabetical keying system provided on any supplemental sheets which are attached to the application.

Item 5. Unless otherwise specified, information which has been previously submitted to the State may be referred to by date of the document transmitting the information. Attached is a document titled "Certificate of Compliance". It may be used in order to certify that your facility will comply with "State Regulations for Protection Against Radiation". If you identify any specific sections of "State Regulations for Protection Against Radiation" (SRPAR) that you plan to request an exemption or variance, please do so specifically and provide a justification for each exemption / variance request.

CERTIFICATE OF COMPLIANCE

FOR MEDICAL ACCELERATORS ONLY

This Certificate of Compliance is to be used as an aid in applying for a Certified Registration authorizing the use of an accelerator for the purposes of Medical Treatment of Humans. This page will be used in place of your specific answers to Item 5a. through Item 5h. and confirms compliance with "State Regulations for Protection Against Radiation" (SRPAR) , 1200-2-9.

5a. (i) The applicant identified in Item 1 will have facilities which are in accordance with each item identified in "SRPAR" , 1200-2-9-.17(4).

(ii) The applicant identified in Item 1 will ensure that the facility will be sufficient to meet the requirements of "SRPAR" 1200-2-5-.50 and 1200-2-5-.60, as applicable. In order to confirm this, please provide your physicist's calculations or a shielding summary.

5b. Please identify your Facility's Radiation Safety Survey Instruments:

<i>Manufacturer's Name</i>	<i>Model</i>	<i>Radiation(s) measured</i>	<i>Range</i>
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5c. The applicant identified in Item 1. will have its Radiation Safety Survey Instruments calibrated by:

<i>Name</i>	<i>City, State</i>	<i>License Number</i>	<i>Telephone</i>
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5d. Please provide the name, address and telephone number of your Personnel Dosimetry provider

5e. The applicant identified in Item 1. will have Operating and Emergency Procedures in accordance with "SRPAR" 1200-2-9-.19.

5f. The applicant identified in Item 1. will not let any person operate the accelerator for the purpose of Treatment of Humans unless they meet or exceed the **LIMITATIONS** prescribed in "SRPAR" 1200-2-9-.18.

5g. The applicant identified in Item 1. will conduct management review to ensure that the operation of the accelerator is within the limitations prescribed in "SRPAR" 1200-2-9-.20 (Tests & Surveys) and "SRPAR" 1200-2-9-.21 (Therapeutic Accelerator Installations).

5h. Attached is a chart showing the overall organizational structure for the applicant identified in Item 1. This must include specific delegations of authority and responsibility for operation of the program.

We will possess and use the accelerator in accordance with the above Items and all applicable provisions of 1200-2-4, 1200-2-5, 1200-2-9, and 1200-2-10 of "State Regulations for Protection Against Radiation".

Date:

Typed Name & Title

Signature

Shielding Notes:

- I. In order for the Division to decrease the amount of time necessary for the review of the Shielding Material that is provided concerning an application for a Certified Registration, please provide answers to each of the following questions for each individual point of measurement:
 1. Please provide the installed or proposed barrier thicknesses.
 2. Please specify if the point being analyzed is a secondary or primary point.
 3. Please specify the distance between the point of measurement and the target. Unless otherwise specified we will assume the distance between the isocenter and the point of measurement to be 1 meter less than the distance between the point of measurement and the target.
 4. Please indicate the location of the measuring point on a floor plan. If this is a ceiling or floor point please note this on the floor plan.
 5. Please specify the percentage of time, (use factor), that the beam will be in each direction.

The above data, except for the floor plan, should be presented in the form of a chart identifying each measuring point and its specific data.

- II. Please specify the following data for each accelerator on this application:
 1. Total weekly workload.
 2. Does the accelerator have a beam stop? If it does then, please provide the beam stop transmission ratio.
 3. The MeV of the Accelerator
 4. Please specify the percent tubehead leakage. If this is not specified we will assume .1% giving a transmission ratio of .001%.
 5. Please specify the percent neutron leakage. This only applies to accelerators that operate at greater than 10MeV.
- III. Please provide a copy of your calculations for all of the above measuring points. This should enable us to locate any discrepancies between your calculations and ours.