

State of North Carolina
 Department of Environment,
 Health and Natural Resources

Division of Radiation Protection

James B. Hunt, Jr., Governor
 Jonathan B. Howes, Secretary
 Dayne H. Brown, Director



MEMORANDUM

TO: Accelerator Licensees Requesting Exemption

FROM: J. Robin Haden, Chief
 Radioactive Materials Section

DATE: June 23, 1994

SUBJECT: "GRAVE DANGER" Posting Requirements
 15A NCAC 11.1624(c)

Rule 15A NCAC 11.1624(c) requires the posting of a "GRAVE DANGER" sign in any "Very High Radiation Area". A very high radiation area is defined as an area, accessible to individuals, in which radiation levels could result in an absorbed dose in excess of 500 rads (5 Gy) in one hour at one meter from a radiation source or from any surface that the radiation penetrates. Medical use accelerators can meet the requirement for such a posting.

Your letter presents an acceptable argument in support of allowing medical facilities to use wording other than "GRAVE DANGER". There is concern that the strong wording could have a detrimental emotional impact on the patients and their families. The North Carolina Regulations for Protection Against Radiation require that medical treatment facilities employ such safety features as aural and video communication with the patient at all times during treatment. In addition, the technologists remain immediately accessible to the patient at all times during treatment. Finally, at least one authorized user listed on the license is expected to be present at the facility when patients are receiving treatment. The likelihood that any severe situation involving the accelerator would occur and not be immediately detected and rectified is very low.

As a result, a temporary exemption to the regulation is granted to your facility pending a final rulemaking action on the subject by the NCRCP. Once a ruling is made on our request to amend the regulation to include an exemption for only human treatment facilities using accelerators, you will be notified of any additional action necessary on your part. The exemption does not apply to all posting requirements. You are expected to continue posting your accelerator in accordance with Rule .0411 of the North Carolina Regulations for Protection Against Radiation. The remainder of your facility must be posted in accordance with the new Section .1600 requirements.

If you have any questions, please feel free to contact me or Wendy B. Tingle of my staff.