November 18th 2017

Canadian Nuclear Safety Commission P.O. Box 1046, Station B 280 Slater Street Ottawa, Ontario, K1P 5S9

Re: REGDOC 2.7.3, Radiation Protection Guidelines for Safe Handling of Decedents

Dear Sir or Madam,

Thank you for the opportunity to provide feedback on the draft REGDOC 2.7.3 "Radiation Protection Guidelines for Safe Handling of Decedents" published August 2017. Having medical facilities that provide the types of therapeutic treatments discussed in the document, we would like to offer some comments on the document.

Need for a REGDOC for Death-Care Professionals

We support the intent of the REGDOC and agree that such guidance is needed for death-care professionals. Having received inquiries in the past from funeral homes about implanted nuclear substances, we agree that more information needs to be provided to the death-care industry in order to raise awareness of the potential hazards and the precautions necessary to manage them.

As RSOs, we appreciate the need to provide safety information and advice to this industry when necessary. However we recognize that we cannot be the sole source of support and may not always be in a position to assist in these situations. We would like to see the REGDOC evolve to a state where enough information is provided to the death-care industry to enable it to be as self-sufficient as possible. The REGDOC in its proposed draft is the first step in reaching that state.

Table 2: Timeframes for Taking Precautions

We would request further information as to why the timeframe for no precautions for an autopsy is significantly different from the timeframe for cremation when Sr-89 is involved. Additionally, it was not clear to our group as to the criteria used to determine these timeframes. While we recognize the need in this document to have an easily understood and practical, some of the time frames seemed short considering the half-life of the isotope and others seemed a large overestimate.



Section 5: Precautions for Handling a Decedent Who Has Undergone Brachytherapy

It is recommended that the section describe the specific tissues in the body where brachytherapy seeds can be placed in order to be complete in its information.

It should be stated that it is possible to slice through seeds during sectioning of an excised tissue. The document should warn of this possibility and advise to proceed cautiously.

Section 6: Precautions for Handling a Decedent Who Has Undergone a Medical Procedure with an Unsealed Nuclear Substance

When unsealed nuclear substances are present, wearing two pairs of disposable gloves should be recommended. The outer pair would be removed and replaced after working with a highly radioactive area.

General Comment

More guidance and discussion on radiation safety practices should be included in the document. While it is mentioned that the hospital RSO can be called for consultation, some generalized protocols should be provided for the mortuary that may not have access to an RSO or radiation protection professional. Funeral homes that handle decedents containing a nuclear substance more than a few times in a year should consider implementing a very basic radiation protection program, somewhat analogous to what transportation companies that handle Class 7 packages are required to consider. Some examples that could use further expansion:

- Appropriate radiation warning signs should be temporarily posted during autopsy and cremation activities so that personnel in the area are aware of the potential hazard.
- Guidance on contamination surveys should be present. This would be particularly
 important when dealing with unsealed nuclear substances during an autopsy or
 embalming. Although it is unlikely that radioactivity would become fixed to surfaces in a
 mortuary, a brief overview of contamination control would be useful. (This may not be
 necessary if the protocols for infection control in the industry provide the same level of
 protection.)
- Storage or disposal of tissues that cannot be returned to the body.
- Restrictions or controls on viewing a body (particularly if death occurs very shortly after an I-131 therapy)

There is generalized information in IAEA SRS-63 (*Release of Patients After Radionuclide Therapy*) and NCRP 155 (*Management of Radionuclide Therapy Patients*) that could be useful in rounding out the content of this REGDOC.



In summary, we support a CNSC lead initiative to improve awareness and promote radiation safety to the death-care industry. We hope that our feedback helps in the development of the REGDOC.

If there are any questions, please do not hesitate to contact me.

Yours truly,

Trevor Beniston, CRPA (R)

Provincial Radiation Safety Leader

Cancer Control Alberta

