

STATE OF ILLINOIS  
**DEPARTMENT OF NUCLEAR SAFETY**

1035 OUTER PARK DRIVE • SPRINGFIELD, ILLINOIS 62704  
217-785-9900 • 217-782-6133 (TDD)

George H. Ryan  
Governor

Thomas W. Ortziger  
Director

March 14, 2002

Joseph DeCicco  
Division of Industrial & Medical Nuclear Safety (Mail Stop T-8F5)  
Office of Nuclear Materials Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
11545 Rockville Pike  
Rockville, MD 20852-2738

Re: "Evaluating Occupational Dose for Individuals Exposed to Byproduct Material and Medical Fluoroscopy" (STP-02-005)

Dear Mr. DeCicco:

The Department has reviewed the above draft Regulatory Issue Summary (RIS) that summarizes a personnel-monitoring compliance issue. As the U.S. Nuclear Regulatory Commission (NRC) states, "This draft RIS will provide guidance for determining doses to individuals who receive exposures to medical x-ray fluoroscopy, while wearing a lead apron." It is the Department's understanding that this guidance will have no impact on an Agreement State because it will not be a matter of compatibility. The Department provides the following comments and suggestions to improve the guidance and regulatory approach.

The NRC has done a good job simplifying this item for its use. However, the NRC did not properly defer to the states for the x-ray portion. Many of the states have adequately addressed this specific problem for more than a decade. The NRC must not impose its method upon the states or the states' registrants (users of x-ray machines) that already have an adequate system in place for addressing the issue and similar issues of exposure to x-rays. Please note that x-ray fluoroscopy is not the only x-ray procedure of concern.

In the third and fourth conditions outlined in the above RIS (when a licensee will be considered to be in compliance) the NRC creates a problem for states. The NRC indicates essentially that the states must accept one of two options. The first option is the licensee (registrant) has to select (from NRC's list) a specific alternative for calculating TEDE "in advance of" when a "high" personnel dosimeter measurement has been received. The second option is that the state must find the licensee's (registrant's) method acceptable before it is applied by the licensee (registrant). The NRC indicates that the licensee (registrant) may find itself out of compliance with the state's regulations if it fails to take such action.

*nm5523*  
*add: Joseph DeCicco to cc list*

Joseph DeCicco  
NRC  
March 14, 2002

2

These statements show that NRC is willing to find a TEDE calculation method acceptable if the method is on NRC's list and it is selected and documented by the licensee before a dosimetry report is received to which a TEDE calculation method should be applied. The NRC does this in a manner that does not defer to the state (the regulator of the primary source of exposure) and accepts a licensee's method regardless of whether or not the state accepts the TEDE calculation method. Regulation of exposure and dose from x-ray is an area where the NRC must be compatible with the states that have responsible jurisdiction in the regulation of the primary source of exposure. The NRC is only involved because it is limiting the total dose to workers of NRC licensees who are receiving the majority of their dose from x-ray machines, which are regulated by the states. The states have primacy in this area. The NRC must not dictate the method or procedure the states use. The affected states and the NRC can agree on a more flexible approach, such as ... a method approved in advance from the NRC's list only if allowed by the state.

In Illinois, the registrant (licensee) does not have to select and document the particular TEDE calculation method in advance. The registrant (licensee) must get case-by-case approval for application of the TEDE calculation method and must justify all assumptions and data that went into the calculation of the TEDE. Only after IDNS staff have found the assumptions, input parameters and calculations acceptable, is the registrant (licensee) authorized to have the dosimetry vendor change the "official" recorded dose for the worker's occupational exposure (dose) record.

The process in Illinois is similar to that used in many other states and the NRC has no right to impose change on the system that has been in place for many years. We are sure that the states will work with NRC to modify its draft so that NRC's purpose can be accomplished without interference with well-established practices of state radiation regulatory programs. The problems with the current draft will be present whether or not the guidance becomes a matter of compatibility. If the NRC should decide to make its procedure a matter of compatibility for the Agreement States, then the NRC will create a circumstance in which Illinois would not be compatible.

Thank you for the opportunity to provide early input into NRC's proposals that impact the states.

Sincerely,



Steven C. Collins, Assistant Manager  
Office of Radiation Safety

cc: Josephine M. Piccone, Deputy Director  
Office of State and Tribal Programs