

**From:** Hill, Trudy [Trudy.Hill@nebraska.gov]  
**Sent:** Tuesday, January 03, 2012 3:25 PM  
**To:** Schneider, Kathleen  
**Subject:** Bryproduct material  
**Attachments:** byproduct material 01-03-2012.docx

Attached is the definition of "byproduct material" that will be submitted to our legislature that if passed would change the definition in our Radiation Control Act. When the Radiation Control Act is changed we will be able to change our regulations. Julia would like you to review it to make sure that it will meet and be compatible with NRC.

I have attached a Word document showing where items (c)(i) thru(d)(ii) that have been added with black underscore. The differences from NRC is where the words in red with red lines thru have been removed and red words underscored were added.

Please let us know if this will be compatible with NRC and take care of our requirement to change the definition of "byproduct material" in our regulations per the letter from Terrence Reis dated October 1, 2010 in item 11 of the attachment to the letter. Thank you!

Please contact me if you have any questions. Thanks

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The redlining below shows the difference with CFR 20.1003 definition of byproduct material and the proposed changes to the definition of byproduct material in the proposed change to Nebraska's Radiation Control Act.,

**(12) Byproduct material means:**

**(a) Any radioactive material, except special nuclear material, yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material; and**

**(b) The tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content, including discrete surface wastes resulting from uranium or thorium solution extraction processes. Underground ore bodies depleted by such solution extraction operations do not constitute byproduct material;**

**(c)(i) Any discrete source of radium-226 that is produced, extracted, or converted after extraction, ~~before, on, or after August 8, 2005~~ for use for a commercial, medical, or research activity; or**

**(ii) Any material that (A) has been made radioactive by use of a particle accelerator and (B) is produced, extracted, or converted after extraction, ~~before on, or after the date of enactment of this paragraph~~ for use for a commercial, medical, or research activity; and**

**(d) Any discrete source of naturally occurring radioactive material, other than source material, that:**

**(i) ~~The United States Nuclear Regulatory Commission, in consultation with the Administrator of the United States Environmental Protection Agency, the United States Secretary of Energy, the United States Secretary of Homeland Security, and the head of any other appropriate federal agency, determines would pose a threat similar to the threat posed by a discrete source of radium-226 to the public health and safety or the common defense and security; and~~**

**(ii) ~~before, on, or after August 8, 2005~~ Is extracted or converted after extraction for use in a commercial, medical, or research activity;**