

## Sollenberger, Dennis

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**From:** Dennis Sollenberger *FSME*  
**Sent:** Wednesday, December 19, 2007 2:22 PM  
**To:** Jenny Goodman  
**Subject:** Re: Byproduct material question

Most medical wastes were held for decay and then disposed of as non-radioactive. These discrete radium wastes were able to be shipped to the Hanford site since NORM wastes were not covered under the LLWPAA. Some limited wastes were disposed of in hazardous waste landfills that allowed low concentration radioactive materials to be disposed of. The wording in the EPA Act was done to preserve the concept.

Please give me a call if you want to discuss further. 301-415-2819.

Dennis

>>> "Jenny Goodman" <[Jenny.Goodman@dep.state.nj.us](mailto:Jenny.Goodman@dep.state.nj.us)> 12/19/2007 2:11 PM >>>  
OK, so what were these past practices? Where else, other than LLRW disposal facilities, was/is discrete NARM being disposed of? Surely hospitals do not routinely send their rad waste to haz or solid waste landfills, do they? Sorry I'm so thick about this subject. This isn't my expertise.

>>> "Dennis Sollenberger" <[DMS4@nrc.gov](mailto:DMS4@nrc.gov)> 12/19/2007 1:40 PM >>>  
Jenny:

I'll give it a try.

The language in the EPA Act regarding LLW definition for the new byproduct material was specifically included to allow the continuation of the past practices for managing the wastes from the same materials. Therefore, the new byproduct material was excluded from the LLWPAA requirements. The wastes that include the new byproduct material may be disposed of in LLW disposal sites, but the EPA Act allows disposal by the other past practices. One of the reasons is that the EPA Act was not supposed to negatively impact the practice of medicine. By preserving the past disposal options, there should not be any impact on the practice of medicine for the disposal of these wastes.

I hope this helps.

Dennis Sollenberger

>>> "Jenny Goodman" <[Jenny.Goodman@dep.state.nj.us](mailto:Jenny.Goodman@dep.state.nj.us)> 12/19/2007 10:58 AM  
>>>

Dennis,  
I read the FR notice. It states that the intent of the provision of the EPA Act (that byproduct material not be considered LLRW), is that the newly added byproduct material is not to be impacted by the compact process for the purposes of the LLRWPA. I don't understand what that means. Does it mean that the newly added byproduct material could go in any LLRW disposal facility regardless of where it was generated, i.e. it would never be considered non-compact waste? I have to explain this in my summary for the general public and I don't think the FR notice answers the question of why the EPA Act included this language. So if you could make it clearer I would appreciate it.  
Thank you

M/84

Jenny

>>> "Dennis Sollenberger" <[DMS4@nrc.gov](mailto:DMS4@nrc.gov)> 10/30/2007 11:29 AM >>>

Jenny:

This issue was discussed on page 55879 and 55880 of the October 1, 2007

Federal Register (72 FR 55864) as part of the basis for the final rule.

If this does not answer your question, please send us another email or give us a call.

Dennis Sollenberger  
Senior Health Physicist

>>> "Jenny Goodman" <[Jenny.Goodman@dep.state.nj.us](mailto:Jenny.Goodman@dep.state.nj.us)> 10/25/2007 3:53 PM

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Dennis/Jenny

I have put the NRC definition of waste in our reg. I just had a couple questions. Byproduct material as defined in paragraphs 2,3, and 4 are not low level radioactive waste. However, as specified in 20.2008, they

can be disposed of in a LLRW facility under part 61. In paragraph (b) of

20.2008, it looks like the NRC is allowing byprod material defined in paragraph 3 and 4 to be disposed of in solid or hazardous waste landfills. Is the idea that this would allow landfills to take short lived nucl. med isotopes such as those that would be present in diapers

after releasing patients from the hospital? If that is the case, then what about isotopes that are defined in paragraph 1, but are the same kind of short lived isotope? Why would it be OK for say TI-201 to go to

a landfill, but not I-131?

Is byproduct material as defined in paragraphs 3 and 4 now considered AEC material? Since there are no limitations on concentrations, would it

then be OK for any discrete source of radium to be disposed of in solid

or haz landfills under the NRC rules?

If these issues were addressed in the response to comments, I apologize

and please just point me to the correct page(s).

Now a question from our lawyer: The definition of licensed material includes byproduct material (not just certain paragraphs). 20.2008(a) says "licensed material as defined in pars 3 and 4 of the definition of

byproduct material..." That doesn't make sense. Licensed material is

not defined in byproduct material. It has its own definition.

Thanks

Jenny