

June 18, 2003

Iain Daniels, Laboratory Manager
Lionville Laboratory, Inc.
208 Welsh Pool Road
Exton, PA 19341-1313

Dear Mr. Daniels:

In your May 6, 2003 letter to the Office of the General Counsel of the U.S. Nuclear Regulatory Commission (NRC), you requested a clarification of the weight limits related to the possession limits for source material under 10 CFR 40.22(a). Although it is not the practice of the NRC to give binding interpretations of the regulations in answer to routine questions on the application of those regulations, the answer to your question provided below, represents long-standing agency application of its regulations.

Section 40.22 provides that "a general license is hereby issued authorizing commercial and industrial firms, research, educational and medical institutions and the Federal, State and local government agencies to use and transfer not more than fifteen (15) pounds of source material at any one time for research, development, educational, commercial or operational purposes. A person authorized to use or transfer source material, pursuant to this general license, may not receive more than a total of 150 pounds of source material in any one calendar year. Your request focuses on how the word "weight" should be construed, i.e., does "weight" refer to the weight of the sample containing the source material radionuclides, or the weight of the source material radionuclides contained in the sample?

Source material is defined in the Commission's regulations at 10 CFR 40.4. It has a two-prong definition, the first addressing source material (uranium or thorium or any combination thereof) in any physical or chemical form; the second, addressing source material as an ore. Regarding the first prong of the definition, the limit for "small quantities" of source material under the general license is based upon the weight of the uranium or thorium, or any combination thereof, contained in the sample, whatever its chemical or physical form may be. However, you must include within the 15/150 pound limit all the source material you receive in your business services. This position requires licensees to make technical judgements regarding the composition of their samples in order to accurately assess the weight of the uranium and or thorium in the samples. If such an assessment is not possible where, for example, the uranium and/or thorium was distributed throughout the sample, then the weight of the sample itself must be used as the weight that is applicable to the exemption limits for "small quantities" in 10 CFR 40.22(a).

Regarding the second prong of the definition, if a sample is an ore which "contain[s] by weight one-twentieth of one percent (0.05%) or more" of uranium, thorium or any combination thereof, the ore itself is source material *en masse*, therefore, the weight of the ore *en masse* is the weight that is applicable to the exemption limits for "small quantities" in 10 CFR 40.22(a).

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If you have any additional questions regarding this response, please feel free to contact Maria E. Schwartz, of my staff, (301) 415-1888 or mes@nrc.gov.

Sincerely,

/ra by/

Stuart A. Treby
Assistant General Counsel
for Rulemaking and Fuel Cycle

Lionville Laboratory, Inc.
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If you have any additional questions regarding this response, please feel free to contact Maria E. Schwartz, of my staff, (301) 415-1888 or mes@nrc.gov.

Sincerely,

/ra by/

Stuart A. Treby
Assistant General Counsel
for Rulemaking and Fuel Cycle

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