

G. Bruchmann

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licensee does not also possess a specific source material license. Therefore, there is no prohibition from transferring the material to a landfill in accordance with the terms of the general license.

At present there is no standard agency guidance available for these issues.

If you have any question, please contact Kevin Null of my staff at (630) 829-9854.

Sincerely,

Original Signed By
B. J. Holt, Chief
Nuclear Materials Licensing Branch

bcc: Monte Phillips

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

96-16

August 30, 1996

MEMORANDUM TO: John R. Madera, Chief
Nuclear Materials Safety and
Safeguards Branch, Region III

FROM: Larry W. Camper, Chief
Medical, Academic, and Commercial
Use Safety Branch
Division of Industrial and
Medical Nuclear Safety, NMSS

SUBJECT: TECHNICAL ASSISTANCE REQUEST RE: Part 40,
Disposal of certain products containing source material.

I am responding to your technical assistance request (TAR) dated February 22, 1996, transmitting letter dated February 1, 1996 (Attachment 1), from the state of Michigan Department of Public Health requesting assistance in interpreting applicable NRC requirements for the receipt, handling, and disposition of certain products containing source material.

As a result of a radiation alarm trip event in Pennsylvania, a load of scrap waste was returned to a Michigan shipper. The waste contained fragments of a zircon-based ceramic, from commercial spacer rings, containing source material at 0.07% by weight of combined uranium and thorium embedded in a concrete-like material. Taken as a whole, the waste material contained less than 0.05% by weight source material.

The state asked if this waste could be considered, in aggregate, exempt from NRC regulations pursuant to 10 CFR 40.13(a) since it is less than 0.05% by weight even though the individual ceramic fragments exceeded this limit. Alternately, they asked if use of this material would be subject to a general license as per 10 CFR 40.22, thus transferable to a landfill without regard to its radioactivity. The state also requested additional NRC guidance on these type of events as they are increasing with the proliferation of radiation alarm systems at recycling and waste disposal sites.

Your recommended responses for these questions are generally correct. Section 40.13(a) exempts persons from the regulations in Part 40, and the requirements for a license to receive, possess, use, transfer or deliver source material, provided the source material (thorium and uranium in this case) is by weight less than 0.05 percent of the mixture, compound, solution or alloy in question. Letters dated July 17, 1996 from Larry W. Camper, Division of Industrial and Medical Nuclear Safety,

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NMSS, and May 31, 1996, from Dominic A. Orlando, Office of Nuclear Material Safety and Orlando, Office of Nuclear Material Safety and Safeguards (Attachments 2 and 3), on a related question, clarifies the staff's position. that in calculating the percent by weight, only substances chemically bonded to or in a true mixture with the source material can be considered. Therefore, the state's assessment in item 1 of their letter is in error as 10 CFR 40.13(a), does not apply to this waste.

However, Part 40.22, authorizing a general license to receive, possess, use, transfer or deliver small quantities of source material, not more than 15 pounds at any one time, or more than 150 pounds per year, does apply to this waste. The section explicitly exempts persons under this section from the provisions of Parts 19, 20, and 21, provided the licensee (Cannon-Muskegon Corporation in this case) does not also possess a specific source material license. Therefore, there is no prohibition from transferring the material to a landfill in accordance with the terms of the general license.

At present there is no standard agency guidance available for these issues.

Attachment: TAR dtd 2\22\96



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