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STATE OF WASHINGTON
DEPARTMENT OF HEALTH
DIVISION OF RADIATION PROTECTION

Airustrial Center, Bldg. 5 • P.O. Box 47827 • Olympia, Washington 98504-7827

March 18, 1994

Paul Lohaus
Paul Lohaus
NMSS Low-Level Waste Projects
U.S. Nuclear Regulatory Commission
Mail Stop 5E4
Washington, D.C. 20555

Dear Mr. Lohaus:

This is in reference to our recent telephone conversation in which we discussed the definition of source material as given in 10 CFR Part 40.4(h), the exemption found in 10 CFR Part 40.13, and how they relate to the definition of waste (low-level radioactive waste) found in 10 CFR Part 61.2. As a result of our discussion, I am requesting technical assistance in order to determine how these sections should be interpreted/applied when deciding the conditions under which uranium and thorium would be classified as low-level radioactive waste.

Under Public Law 99-240, the Northwest Compact is not required to accept for disposal commercial and certain federal low-level radioactive wastes as defined in 10 CFR Part 61.2 if the waste is generated outside the Compact. In accordance with this law, no out-of-region low-level radioactive waste has been allowed into the commercial low-level radioactive waste disposal site in Richland since December 1992. This law, however, does not apply to NORM waste. As a result, in the last six months, the department has received over 100 requests for disposal of uranium and thorium-contaminated materials which the generators are classifying as NORM waste. The department has been told by some generators that the NRC considers uranium and thorium waste materials (ores or otherwise) at concentrations less than 0.05 percent by weight to be exempted from NRC and Washington State licensing and disposal criteria. Therefore, the material would not be classified as low-level radioactive waste.

In defining source material, 10 CFR Part 40.4(h) states: (1) uranium or thorium, or any combination thereof in any physical or chemical form, or (2) ores which contain by weight 0.05 percent or more of uranium, thorium, or any combination thereof. It appears that this definition of source material includes all uranium and thorium materials except those ores containing less than 0.05 percent uranium or thorium by weight, which are NORM.

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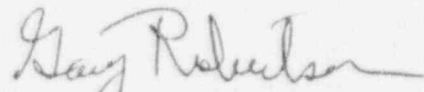
10 CFR Part 40.13(a) refers specifically to the definition of source material given in 10 CFR Part 40.4(h)(1) above, and exempts this material from the regulations in Part 40, and from the license requirements specified in Section 62 of the Atomic Energy Act. It appears that this exemption would allow generators of such material to dispose of this material at facilities other than low-level radioactive waste sites.

I am requesting technical assistance from the NRC in order to determine the following:

1. Does the NRC interpret the definition of source material given in 10 CFR Part 40.4(h) to include all uranium and thorium materials, except those ores containing less than 0.05 percent uranium or thorium by weight?
2. If the material described in 10 CFR 40.4(h)(2) is not source material, what does the NRC consider it to be?
3. Does the NRC consider the material described in 10 CFR 40.13(a) to be source material? If it is source material and is declared a waste, would the NRC also consider it to be low-level radioactive waste as defined in 10 CFR 61.2? If it is not considered to be low-level radioactive waste, what is it?
4. Does the exemption given in 10 CFR Part 40.13(a) allow generators of such material to dispose of this material at facilities other than low-level radioactive waste sites?
5. Does the NRC agree with generators' opinions that uranium and thorium concentrations of less than 0.05 percent by weight are exempted from NRC and Washington State disposal criteria, and should not be classified as low-level radioactive waste?

I appreciate your assistance in these matters. If you have any questions, please feel free to contact me at (206) 753-3459.

Sincerely,



Gary Robertson, Head
Waste Management Section

GR:krf