



Magnesium Elektron, Inc.

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*Creating the Future of Zirconium Chemicals*

CERTIFIED MAIL NO. P 843 876 205

January 20, 1994

Mr. Charles E. Gaskin  
Licensing Section 1, Licensing Branch  
Division of Fuel Cycle Safety and Safeguards  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Reference: Magnesium Elektron, Inc.  
Docket No. 40-90.4

Dear Mr. Gaskin:

40-8984

Enclosed are three copies of our report on the "Identification of Radiological Constituents in Waste Sludge". This report presents the methodology, data, and conclusions of MEI's program to characterize the sludge at its Flemington, NJ site. The activities were undertaken in accordance with the work plan previously approved by the NRC on June 16, 1993.

As demonstrated in the report, the data show that the concentration of source material in the sludge is very low - well below the exempt level (0.05 percent by weight) established by the NRC's regulations at 10 C.F.R. Part 40.13(a). The mean concentration of source material is 0.022 percent by weight in Pond 6-Upper and 0.024 percent by weight in Pond 6-Lower. These concentrations are less than half of the NRC's exempt level.

The data also show that the sludge is relatively homogeneous. More importantly, not one of the approximately 70 samples analyzed had a measured concentration above the exempt level. In fact, the highest concentration measured in any sample was only 0.039 percent by weight.

Based on these results, MEI requests your concurrence with the conclusion that the source material at the Flemington site is exempt from NRC licensing requirements.

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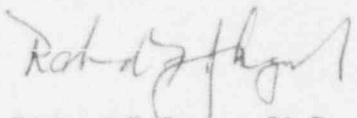
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Mr. Charles E. Gaskin, NRC  
January 20, 1994

We also request that you remove the Flemington site from the NRC's Site Decommissioning Management Plan.

If you have any questions, please call me at 908-782-5800, ext. 500, or David Lewis at 202-663-8474. We appreciate your attention to this matter and look forward to its prompt resolution.

Sincerely,



Richard F. Jaeger, Ph.D.  
Manager of Environmental and  
Technical Affairs

RFJ/kmr  
Enclosure

Copy: Dr. Robert Stern - NJDEPE  
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