



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

May 3, 1990

Docket No. 40-7102

Mr. W. Fergus Porter, President
Shieldalloy Metallurgical Corporation
25 East 39th Street
New York, NY 10016

Dear Mr. Porter:

Re: Newfield Source Material License SMB-743

In a letter dated April 10, 1990, you requested our concurrence on a plan to circumscribe the Source Material Storage Yard (SMSY) with ferrovanadium slag. The ferrovanadium slag was to be placed in gabions and used to shield the SMSY. Although we concur with the idea of reducing exposure rates at the site boundary of your Newfield site, we have some questions about the effectiveness and efficiency of your proposed plan. In particular, we are concerned that this proposed plan will have little effect on boundary exposures because of the possibility that sky shine will allow the bypassing of this slag barrier. We are also concerned that although the ferrovanadium slag will be placed in gabions, these metal cages may rust and if not originally kept separated from the material in the SMSY, may eventually lead to the commingling of the slags. This commingling could result in an unnecessary increase in the amount of material which would require disposal at the time of the site's eventual decommissioning. Because of these concerns, we request that you submit a more detailed proposal addressing these comments. We suggest that you include calculations on expected shielding results and design drawings for placement of the ferrovanadium slag.

In a separate issue, you have notified us of your intent to do a detailed characterization of your site for hazardous and radiological materials for the State of New Jersey. It is our understanding that this characterization study will include areas outside the fence line and most areas within the fence line at your Newfield, NJ site. This characterization study will then be used as the basis to initiate a project to consolidate any radioactive materials mislocated through various means back into the SMSY. In order to avoid the need for a separate characterization study for the Nuclear Regulatory Commission, we suggest that you submit a plan to us for the characterization of radiological materials at your Newfield site. If you feel that the plan submitted to the State of New Jersey (or just the radiological portion of that plan) will be sufficient for us to base a review on, please feel free to use that as your submittal.

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We do request that your submitted plan include dates for the initiation and completion of the characterization study, and an estimated time to review the data from the study and submit a cleanup plan.

We appreciate your cooperation.

Sincerely,

Original Signed By

Charles J. Haughney, Chief
Fuel Cycle Safety Branch
Division of Industrial and
Medical Nuclear Safety

cc: John Trella
New Jersey Department of
Environmental Protection

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(SHEILDALLOY, NEWFIELD, NJ)

*see previous concurrence

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