

SHIELDALLOY METALLURGICAL CORPORATION

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Mr. Charles J. Haughney, Chief Fuel Cycle Safety Branch Division of Industrial and Medical Nuclear Safety United States Nuclear Regulatory Commission Washington, D. C. 20555

> Re: Newfield Source Material --License SMB-743; Docket No. 40-7102

Dear Mr. Haughney:

I am in receipt of your letter of May 3, 1990 regarding Shieldalloy Metallurgical Corporation's (SMC's) subject license. Your letter requested that SMC provide additional technical support and information concerning our proposal to utilize ferrovanadium slag for shielding and circumscribing the Source Material Storage Yard (SMSY). Also you requested that SMC provide NCR with a copy of our Radiological Characterization Work Plan for Newfield.

Your letter expresses concern that the plan might have little effect on the boundary exposures and that failure of the gabions may eventually lead to commingling of ferrovanadium slag with those containing source material. In regard to the first issue, it should be pointed out that the placement of these materials is a voluntary effort by Shieldalloy that is expected to further reduce exposure rates that are already within acceptable levels for NRC as well as New Jersey Department of Environmental Protection regulations. Unless you believe that you must have precise calculations on the additional shielding that will be provided, we would prefer to allocate our financial resources to other portions of the project.

SMC is interested in utilizing the ferrovanadium slag as part of its plan for ultimate in-situ decommissioning of the columbium slag pile. As a result, we share your concerns about the stability of the gabions. We have investigated their use and have found that the use of gabions for retaining walls in highway construction throughout the world is testimony to their longevity and durability. The gabions that are being considered for this application are zinc coated. It is also possible to use gabions with PVC covering. SMC has not yet developed a detailed design

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or bid package for utilizing gabions and the ferrovanadium slag in the SMSY. It was our hope that your office would first agree with the concept of using these materials as described in our letter of April 10, 1990 before we proceeded with developing full technical information and detailed engineering calculations and design. Upon receipt of your approval of the concept, we will prepare these documents and provide you with a copy.

Regarding the characterization study, SMC has asked ENSR, our consultant, to develop a work plan which will identify the locations and the extent of the areas where source materials have been mislocated. This characterization study will also estimate the quantity of material which SMC will need to bring into the SMSY in order to decontaminate the area outside the fence line and the site. The development of this work plan is expected to be complete in approximately three weeks. We will forward this work plan for your review as soon as it is available.

The Remedial Investigation Work Plan (RIWP) currently under review by NJDEP was developed merely for the purpose of identifying potential sources of chemical contamination which may have resulted from past hazardous material handling and operational practices used at the site. The RIWP does not address the radiological characterization and identification of areas where source materials may have been mislocated, since this is clearly regulated by NRC and is SMC's responsibility under our subject license.

If there are any questions concerning this matter, please do not hesitate to contact me or my environmental staff.

Yours faithfully,

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cc: John Trella, NJDEP Donna Gaffigan, NJDEP-BCM Betsy Ullrich, NRC Region I Michael A. Finn David R. Smith Michael R. Morgenstern John Austin, Esq. Charles L. Harp, Esq. Raymond E. Holmes, ENSR Acton