



SHIELDALLOY METALLURGICAL CORPORATION

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August 12, 1991

Jerry J. Swift, Section Leader
Division of Industrial & Medical Nuclear Safety
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Docket No. 40-7102
License No. SMB-743

RE: Leachability Test of Source Material

Dear Sir:

Shieldalloy Metallurgical Corporation (SMC) has received your letter dated June 14, 1991 concerning leachability testing of slag stored in the SMC Source Material Storage Yard (SMSY). SMC reviewed the American National Standard ANSI/ANS-16.1-1986 and contracted Teledyne Isotopes (TI) of Westwood, N.J. to provide analytical support for the requested data as well as consultation for sample collection procedures.

After reviewing the ANSI procedure for specimen preparation (§ 2.1), SMC attempted to prepare the samples as similar as possible to the slag solidification process. Because obtaining a specimen by core drilling is not recommended, SMC decided to take samples from molten slag during the operational process. Consequently on July 12, 1991 four samples of ferrocolumbium standard ratio slag were taken to the dimensions recommended in the ANSI procedures. Of the four samples taken, two samples were recovered by TI within specified dimensions and analysis was begun on July 30, 1991. Isotopic analysis will be conducted for Uranium-238, Thorium-232, and Radium-226. TI expects analytical results to be available by the end of November 1991.

To confirm the telephone conversation between Mr. Yawar Faraz and myself on August 12, 1991, it is SMC's understanding that the analyses presently being conducted will satisfy the leachability data which you have requested. If in the event leachability analyses are required of additional types of source

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material slag, please understand they are produced on an infrequent basis. Also be advised that ferrocolumbium standard ratio slag, which was sampled, constitutes at least 95% of the source material slag at the Newfield facility. SMC will notify your office of production schedules if there is a future need for leachability data requested by the NRC.

If you have any further questions, please do not hesitate to contact me at (609)692-4200.

Sincerely,



Craig R. Rieman
Radiological Safety Manager

CRR:lms

CC: Richard D. Way
David R. Smith
Charles L. Harp, Jr., Esq.