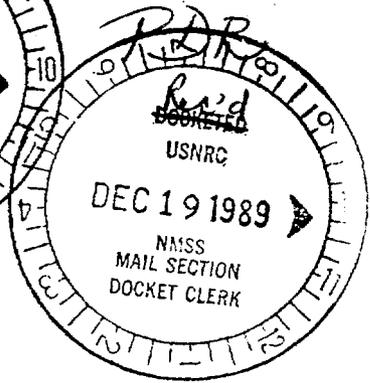


40-7102



State of New Jersey
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 DIVISION OF HAZARDOUS WASTE MANAGEMENT
 Lance R. Miller, Acting Director
 CN 028
 Trenton, N.J. 08625-0028
 (609) 633-1408

06 DEC 1989

Gary Comfort
 Mail Stop 6H3
 U.S.N.R.C.
 Washington, DC 20555

Dear Mr. Comfort:

As per our conversation of November 30, 1989, enclosed for your information please find a copy of Shieldalloy Metallurgical Corporation's proposal to use ferrovandium slags as radioactive shielding for ferrocolumbium slags. The ferrocolumbium slags contain the following concentrations of radionuclides:

	<u>"High-Ratio" Slag</u>	<u>"Standard" Slag</u>
Th-232	336 pCi/g	516 pCi/g
Ra-226	69 pCi/g	123 pCi/g
U-238	105 pCi/g	202 pCi/g

These values were reported in the Oak Ridge Associated Universities report "Radiological Survey of Shieldalloy Corporation, Newfield, New Jersey" dated July 1988.

Shieldalloy has agreed to submit additional details regarding this issue. I will forward this information to you as soon as I receive it.

If you have any questions, please do not hesitate to contact me at (609) 633-1455.

Sincerely,

Donna L Gaffigan

Donna Gaffigan, Case Manager
 Bureau of Federal Case Management

sw

Enclosure

- c. Joseph Morris, DEQ/BER (w/out enclosure)
- Kenneth Elwell, DAG (w/out enclosure)

26188

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*Also Member of Pennsylvania Bar
+Member of Pennsylvania Bar Only

November 10, 1989

Direct Dial
609-354-3065

HAND DELIVERED

Kenneth W. Elwell, Esquire
Deputy Attorney General
New Jersey Dept. of Law & Public Safety
Division of Law - Environmental Protection Section
Richard J. Hughes Justice Complex
CN 112
Trenton, NJ 08625

Re: NJDEP - Shieldalloy Metallurgical Corporation
OAL Docket No. EHW8305-88
Our File No. SHI-004-805

Dear Mr. Elwell:

As per our recent telephone conference with Administrative Law Judge Miller, I am responding on behalf of Shieldalloy to your July 12, 1989 letter to me, again following the original numbered paragraphs.

(1) If all outstanding issues are resolved, Shieldalloy will increase its offer to \$50,000.00 in settlement of the penalties imposed.

(2) (a) Attached is a list of descriptions and disposal practices for the various drosses, cleanouts and furnace cores.

(2) (b) Shieldalloy will agree to the same schedule of stipulated penalties as are set forth in the October, 1988 ACO for disposal not completed within six months, provided that customary force majeure provisions apply.

Kenneth W. Elwell, Esquire

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November 10, 1989

(2) (c) We are unclear as to what is meant by DEP approval of the Company's "manner of disposal". So long as the manner of disposal is lawful, DEP really has no right to dictate some other lawful method. I do not see this provision being a "deal breaker", however.

(3) Your proposed conditions (a) through (d) are acceptable to the company, provided, however, that as to (d) Shieldalloy likewise does not waive its rights regarding DEP's future action in this regard.

(4) I am enclosing a copy of Dr. Raymond Holmes' November 10, 1989 letter to Shieldalloy's David Smith setting forth the factors demonstrating that the ferrovanadium standard grade slag is appropriate for radiological shielding and delineation of the source material control area. As far as the "no net gain", to the extent material remains on site and is used exclusively for shielding, there will be no loss of the material. This material, however, is still marketable for roadbed and aggregate, so that its transport off site for such purposes would contribute to a "net loss". For the moment, the company is not engaged in the manufacturing process that results in ferrovanadium standard grade slag. Should the company resume that process, however, it estimates that it would result in not more than 2,000 tons per year of this slag. This takes us to our other point, which is that Shieldalloy would be agreeable to managing this slag pile as a small scale "Class III sanitary landfill", as per N.J.A.C. 7:26-2.4(c)4, and would welcome the chance to talk in detail about the submission requirements under that section, since they are somewhat ambiguous. (See e.g., N.J.A.C. 7:26-2.4(c)4iv which purports to allow a less stringent engineering design and refers the reader to N.J.A.C. 7:26-2.10, which sets forth the requirements except for those facilities that are exempted under N.J.A.C. 7:26-2.4(c). This is a wholly circular exercise).

(5) No comment is necessary.

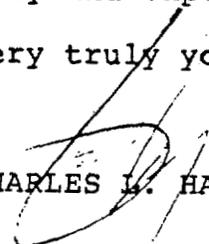
(6) Regarding the company's sampling procedures for chromium slag, I am enclosing copies of the company's September 5, 1989 letter to Mr. Whitford of the DEP's Waste Classification Section, and Mr. Smith's October 16, 1989 letter to the DEP's Mr. Qiu. The company is awaiting DEP's response to these submissions.

Kenneth W. Elwell, Esquire
Page 3
November 10, 1989

(7) Ground Water Monitoring. As you know, Judge Miller has consolidated our administrative hearing on the NJPDES IWMF permit denial with this proceeding. Shieldalloy is agreeable to withdrawing that hearing request, provided we reach an understanding as to what, if any, ground water monitoring requirements remain, particularly since the ground water monitoring effort that is currently in place is so massive. Groundwater monitoring for the "RCRA impoundments" will be governed by the DEP-approved closure and postclosure plans and by the NJPDES-DGW permit that is to be issued in connection therewith.

I am sorry that it took us so long to get back to you. Please be assured that the Company is committed to do its best to resolve this matter amicably and expeditiously.

Very truly yours,


CHARLES L. HARP, JR.

CLH/sk/008

ENSR Consulting
and Engineering

35 Nagog Park
Acton, Massachusetts 01720
(508) 635-9500

Mr David R Smith,
Director of Environmental Services,
Shieldalloy Metallurgical Corporation,
Newfield, New Jersey 08344

Ref: 5990-002-REH-1110A
Date; November 10, 1989

Dear David,

Reference: Shieldalloy Metallurgical Corporation - Newfield, NJ

As your appointed Health Physics Consultant I am writing to advise you on the suitability of ferrovanadium standard grade slag to provide delineation and shielding for the accumulation of source materials residues and slags at your Newfield Facility.

As you are aware this facility processes "source material" and is regulated by the USNRC in accordance with 10 CFR 40 under your license SMB-743.

To meet these requirements I recommend that you delineate the area utilised for storage of radioactive slags and residues with a shielded barrier. This barrier should be a have a minimum thickness of 3 feet and be six feet high. In addition the north face should be shielded to the full height of the slag accumulation to ensure that the dose rate at the site perimeter is maintained at an appropriate level. As you accumulate radioactive slags and residues to the height for their ultimate decommissioning you should provide a minimum thickness of 8 feet of shielding/intrusion protection around the accumulation.

I strongly recommend that you utilise the ferrovanadium slag generated at the facility to provide this delineation/intrusion protection and as a shielding barrier. This material is ideal for this purpose by virtue of its density, chemical stability, and availability. We have found that such materials pack to give a high standard of physical stability when applied to the stabilization of slopes, and have low settlement rates when used on extended horizontal surfaces. Further its hardness is an added protection against long term losses through erosive processes.

You will be aware that the use of the ferrovanadium is technically identical with the use of grinal slags which are being used, with the approval of the USNRC, for shielding of the East Pile of radioactive slag at your Cambridge Ohio Facility.