

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p style="text-align: center;">Licensee</p> <p>1. Shieldalloy Metallurgical Corporation West Boulevard</p> <p>2. Newfield, New Jersey 08344</p>	<p>3. License Number SMB-743 Amendment 3</p> <p>4. Expiration Date October 20, 2002</p> <p>5. Docket No. 40-7102 Reference No.</p>
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6. Byproduct Source, and/or Special Nuclear Material

- A. Thorium
- B. Uranium

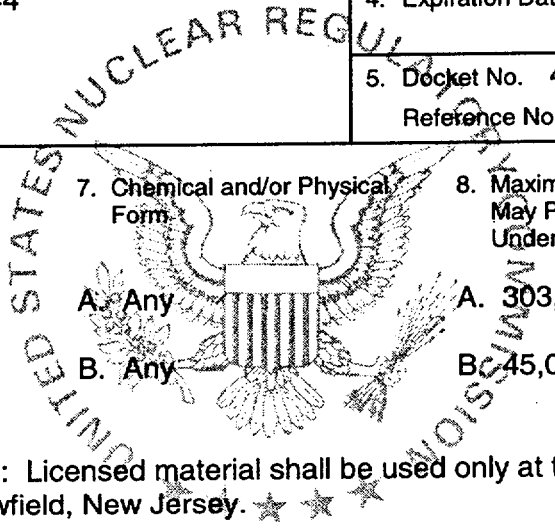
7. Chemical and/or Physical Form

- A. Any
- B. Any

8. Maximum amount that Licensee May Possess at Any One Time Under This License

- A. 303,050 kilograms
- B. 45,000 kilograms

- 9. Authorized place of use: Licensed material shall be used only at the licensee's existing facilities at West Boulevard, Newfield, New Jersey. ★ ★ ★
- 10. Authorized use: Research and development, processing, and storage of raw materials for the production of specialty alloys and slag fluidizers, and for distribution of raw materials, in accordance with statements, representations and procedures contained in application dated September 15, 1995 and supplements dated November 28, 1995, August 11, September 24, September 26, and November 25, 1997, March 25, 1998, January 28, March 10, March 18, June 1, and September 9, 1999.
- 11. Deleted by Amendment 2, August 1999.
- 12. Notwithstanding the Derived Air Concentration (DAC) and Annual Limit on Intake (ALI) listed in Appendix B to 10 CFR Part 20, the licensee may use adjusted DAC values for thorium of 1.9 E-11 microcuries (µCi) per milliliter and for uranium of 8.4 E-11 µCi per milliliter and adjusted ALI values for thorium of 0.047 µCi and for uranium of 0.2 µCi.
- 13. Deleted by Amendment 2, August 1999.



**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

SMB-743

Docket or Reference Number

40-7102

Amendment No. 3

14. Deleted by Amendment 2, August 1999.
15. By October 20, 1999, SMC shall either (1) provide an alternate decommissioning funding plan in accordance with 40.36 (d) to cover the entire cost of decommissioning the site, including all slag and baghouse dust, in accordance with NRC requirements or (2) immediately cease operations involving source material, submit a decommissioning plan in accordance with 40.42(g) by April 20, 2000, and commence decommissioning upon approval of the NRC.
16. The licensee shall keep records of the working hours of the worker(s) working in the baghouse area performing baghouse activities such as removing or changing bags, or transferring baghouse dust to trucks for transport. The licensee shall perform dose calculations using the records of the working hours of the workers in the various work places. The licensee shall also sum up the total external and internal doses to determine if the workers' total exposure is less than 10% of the dose limits as specified in 10 CFR Part 20.1201(a). If 10% of the dose limit is exceeded or is expected to be exceeded, the licensee shall conduct worker's radiation monitoring as required by 10 CFR Part 20.1502.
17. If the licensee uses respiratory protection equipment to limit intakes pursuant to 10 CFR 20.1702 the licensee shall perform bioassays to evaluate actual intakes at intervals not to exceed twelve months. Whenever an individual will no longer use respiratory protection equipment, the licensee shall perform a bioassay to evaluate the actual intake during the period of respirator use.

FOR THE NUCLEAR REGULATORY COMMISSION

Dated: 11/20/99

By: *T. S. Sherr* for
Theodore S. Sherr, Chief
Division of Fuel Cycle Safety
and Safeguards, NMSS
Washington, DC 20555