

**MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and the applicable parts of Title 10, Code of Federal Regulations, Chapter I, Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 51, 70, and 71, and in reliance on statements and representations heretofore made by the licensee, a licensee 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.

1. Licensee		3. License Number		SMB-743
2. Shieldalloy Metallurgical Corporation Aluminum Products & Powders Division		4. Expiration Date		October 20, 2002 (Extended)
35 South West Boulevard P.O. Box 768 Newfield, NJ 08344-0768		5. Docket or Reference Number		040-07102
6. Byproduct, Source, and/or Special Nuclear Material:	7. Chemical and/or Physical Form:	8. Maximum Amount that Licensee May Possess at Any One Time Under This License:		
A. Thorium	A. Any	A. 303,050 kilograms		
B. Uranium	B. Any	B. 45,000 kilograms		

9. Authorized use: Decommissioning activities 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, September 9, September 23, 1999, May 2, May 22, 2000, March 30, and August 27, 2001, August 30, 2002, and November 7, 2002.

**CONDITIONS**

- 10. Licensed material may be used only at the licensee's existing facilities at 35 South West Boulevard, Newfield, New Jersey.
- 11. The Radiation Safety Officer for this license is David R. Smith.
- 12. Notwithstanding the Derived Air Concentrations (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.

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SUPPLEMENTARY SHEET**

License Number: SMB-743

Docket or Reference Number: 40-7102

Amendment No. 10

13. 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.
14. 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.
15. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
16. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence as listed in Condition 9 are more restrictive than the regulations.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/s/IRA

Date: 2/1/11

Keith I. McConnell, Deputy Director  
Decommissioning and Uranium Recovery  
Licensing Directorate  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials  
and Environmental Management Programs