

U.S. NUCLEAR REGULATORY COMMISSION
APPLICATION FOR SOURCE MATERIAL LICENSE

Pursuant to the regulations in Title 10, Code of Federal Regulations, Chapter 1, Part 40, application is hereby made for a license to receive, possess, use, transfer, deliver or import into the United States, source material for the activity or activities described.

1. (Check one) <input type="checkbox"/> (a) New license <input checked="" type="checkbox"/> (b) Amendment to License No. <u>STB-1097</u> <input type="checkbox"/> (c) Renewal of License No. _____ <input type="checkbox"/> (d) Previous License No. _____		2. NAME OF APPLICANT Consolidated Aluminum Corporation																	
		3. PRINCIPAL BUSINESS ADDRESS 11960 West Line Industrial Drive St. Louis, Missouri 63146																	
4. STATE THE ADDRESS(ES) AT WHICH SOURCE MATERIAL WILL BE POSSESSED OR USED Madison Plant, College and Weaver Streets, Madison, Illinois 62060																			
5. NAME OF PERSON TO BE CONTACTED CONCERNING THIS APPLICATION B. W. Moore		6. TELEPHONE NO. OF INDIVIDUAL NAMED IN ITEM 5 (618)-452-5190																	
7. DESCRIBE PURPOSE FOR WHICH SOURCE MATERIAL WILL BE USED 																			
8. STATE THE TYPE OR TYPES, CHEMICAL FORM OR FORMS, AND QUANTITIES OF SOURCE MATERIAL YOU PROPOSE TO RECEIVE, POSSESS, USE, OR TRANSFER UNDER THE LICENSE <table border="1" style="width:100%"><thead><tr><th style="width:25%">(a) TYPE</th><th style="width:25%">(b) CHEMICAL FORM</th><th style="width:25%">(c) PHYSICAL FORM (Including % U or Th.)</th><th style="width:25%">(d) MAXIMUM AMOUNT AT ANY ONE TIME (kilograms)</th></tr></thead><tbody><tr><td>NATURAL URANIUM</td><td></td><td></td><td></td></tr><tr><td>URANIUM DEPLETED IN THE U-235 ISOTOPE</td><td></td><td></td><td></td></tr><tr><td>THORIUM (ISOTOPE)</td><td></td><td></td><td></td></tr></tbody></table>				(a) TYPE	(b) CHEMICAL FORM	(c) PHYSICAL FORM (Including % U or Th.)	(d) MAXIMUM AMOUNT AT ANY ONE TIME (kilograms)	NATURAL URANIUM				URANIUM DEPLETED IN THE U-235 ISOTOPE				THORIUM (ISOTOPE)			
(a) TYPE	(b) CHEMICAL FORM	(c) PHYSICAL FORM (Including % U or Th.)	(d) MAXIMUM AMOUNT AT ANY ONE TIME (kilograms)																
NATURAL URANIUM																			
URANIUM DEPLETED IN THE U-235 ISOTOPE																			
THORIUM (ISOTOPE)																			
(e) MAXIMUM TOTAL QUANTITY OF SOURCE MATERIAL YOU WILL HAVE ON HAND AT ANY TIME (kilograms) 																			
9. DESCRIBE THE CHEMICAL, PHYSICAL, METALLURGICAL, OR NUCLEAR PROCESS OR PROCESSES IN WHICH THE SOURCE MATERIAL WILL BE USED, INDICATING THE MAXIMUM AMOUNT OF SOURCE MATERIAL INVOLVED IN EACH PROCESS AT ANY ONE TIME, AND PROVIDING A THOROUGH EVALUATION OF THE POTENTIAL RADIATION HAZARDS ASSOCIATED WITH EACH STEP OF THOSE PROCESSES 																			
10. LIST THE NAMES AND ATTACH A RESUME OF THE TECHNICAL QUALIFICATIONS INCLUDING TRAINING AND EXPERIENCE OF APPLICANT'S SUPERVISORY PERSONNEL AND THE PERSON RESPONSIBLE FOR THE RADIATION SAFETY PROGRAM (OR OF APPLICANT IF AN INDIVIDUAL). B. W. Moore - Technical Manager B. R. Hughes - Process Engineer J. E. Wallace - Casting Superintendent J. P. D. Wilson - Industrial Relations Representative																			
11. DESCRIBE THE EQUIPMENT AND FACILITIES WHICH WILL BE USED TO PROTECT HEALTH AND MINIMIZE DANGER TO LIFE OR PROPERTY AND RELATE THE USE OF THE EQUIPMENT AND FACILITIES TO THE OPERATIONS LISTED IN ITEM 9. INCLUDE: (a) RADIATION DETECTION AND RELATED INSTRUMENTS (including film badges, dosimeters, counters, air sampling, and other survey equipment as appropriate. The description of radiation detection instruments should include the instrument characteristics such as type of radiation detected, window thickness, and the range(s) of each instrument). 																			
(b) METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED IN (a) ABOVE, INCLUDING AIR SAMPLING EQUIPMENT (for film badges, specify method of calibrating and processing, or name supplier). 																			
8508130215 B50719 REG3 LIC40 STB-1097 PDR																			

11(c) VENTILATION EQUIPMENT WHICH WILL BE USED IN OPERATIONS WHICH PRODUCE DUST, FUMES, MISTS, OR GASES, INCLUDING PLAN VIEW SHOWING TYPE AND LOCATION OF HOOD AND FILTERS, MINIMUM VELOCITIES MAINTAINED AT HOOD OPENINGS AND PROCEDURES FOR TESTING SUCH EQUIPMENT.

12. DESCRIBE PROPOSED PROCEDURES TO PROTECT HEALTH AND MINIMIZE DANGER TO LIFE AND PROPERTY AND RELATE THESE PROCEDURES TO THE OPERATIONS LISTED IN ITEM 9. INCLUDE: (a) SAFETY FEATURES AND PROCEDURES TO AVOID NONNUCLEAR ACCIDENTS, SUCH AS FIRE, EXPLOSION, ETC., IN SOURCE MATERIAL STORAGE AND PROCESSING AREAS.

(b) EMERGENCY PROCEDURES IN THE EVENT OF ACCIDENTS WHICH MIGHT INVOLVE SOURCE MATERIAL.

(c) DETAILED DESCRIPTION OF RADIATION SURVEY PROGRAM AND PROCEDURES.

13. WASTE PRODUCTS: If none will be generated, state "None" opposite (a), below. If waste products will be generated, check here ☐ and explain on a supplemental sheet:

- (a) Quantity and type of radioactive waste that will be generated.
- (b) Detailed procedures for waste disposal.

14. IF PRODUCTS FOR DISTRIBUTION TO THE GENERAL PUBLIC UNDER AN EXEMPTION CONTAINED IN 10 CFR 40 ARE TO BE MANUFACTURED, USE A SUPPLEMENTAL SHEET TO FURNISH A DETAILED DESCRIPTION OF THE PRODUCT, INCLUDING:

- (a) PERCENT SOURCE MATERIAL IN THE PRODUCT AND ITS LOCATION IN THE PRODUCT.
- (b) PHYSICAL DESCRIPTION OF THE PRODUCT INCLUDING CHARACTERISTICS, IF ANY, THAT WILL PREVENT INHALATION OR INGESTION OF SOURCE MATERIAL THAT MIGHT BE SEPARATED FROM THE PRODUCT.
- (c) BETA AND BETA PLUS GAMMA RADIATION LEVELS (Specify instrument used, date of calibration and calibration technique used) AT THE SURFACE OF THE PRODUCT AND AT 12 INCHES.
- (d) METHOD OF ASSURING THAT SOURCE MATERIAL CANNOT BE DISASSOCIATED FROM THE MANUFACTURED PRODUCT.

CERTIFICATE

(This item must be completed by applicant)

15. The applicant, and any official executing this certificate on behalf of the applicant named in Item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 40, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

BY: _____

(Signature)

J. T. Conroy

(Print or type name)

Dated April 16, 1985

Plant Manager

(Title of certifying official authorized to act on behalf of the applicant)

WARNING: 18 U.S.C. Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

April 16, 1985

ATTACHMENT TO FORM NRC-2

B. W. MOORE - Technical Manager

B.S. Degree Metallurgical Engineering; 21 years experience in Light Metals Industry, casting and mill products. Various projects on exposure of material and products to low and moderate levels of radiation.

B. R. HUGHES - Casting Process Engineer

B.S. Degree in Electrical Engineering Technology; six years experience in casting Aluminum and Magnesium alloys. Nine months intensive training on casting of light metals. Process Engineer in charge of Mg-Th alloy casting.

J. E. WALLACE - Casting Superintendent

Sixteen (16) years experience in casting light metals. Has supervised the casting and production of Mg-Th alloys over the past three years.

J. P. D. WILSON - Industrial Relations Representative

B.S. in Education, M.B.A. in Labor Relations. Four years experience in Industrial Relations; three years experience in safety. Two years experience dealing with asbestos and asbestos monitoring.

JTC/ly

CONTROL NO. 7 8 8 8 8