



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

FEB 5 1981

Aluminum Company of America
ATTN: James A. Dunbar
Plant Manager
Forging Division
1600 Harvard Avenue
Cleveland, OH 44105

License No. C-5023
(Expired February 28, 1961)

Gentlemen:

This refers to the special inspection conducted by Dr. M. J. Oestmann of this office on December 17, 1980 and January 12, 1981, of activities at your plant site, 2210 Harvard Avenue, Cleveland, Ohio. This site was formerly licensed by the AEC License No. C-5023 (expired February 28, 1961).

This special inspection was conducted to independently survey the areas in your plant where licensed material was used to verify that facilities and equipment were decontaminated to acceptable levels. The results of the survey further meet the NRC "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use."

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room, except as follows. If this report contains information that you believe to be proprietary, you must apply in writing to this office, within twenty-five days of the date of this letter, to withhold such information from public disclosure. The application must include a full statement of the reasons for which the information is considered proprietary, and should be prepared so that proprietary information identified in the application, is contained in an enclosure to the application.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

W. L. Fisher

W. L. Fisher, Acting Chief
Fuel Facility and Materials
Safety Branch

Enclosure: IE Inspection
Report No. 40-501/80-10

cc: LFMB, ltr only -

cc w/encl:
Central Files
Reproduction Unit NRC 20b
NSIC
TIC

9707030156 910516
PDR ADOCK 04000501
C PDR

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 40-501/80-10

License No. C-5023 (expired February 28, 1961)

Licensee: Aluminum Company of America
1501 Alcoa Building
Pittsburgh, PA 15219

Inspection At: Alcoa Forging Plant
Newburgh Heights
Cleveland, OH 44105

Inspection Conducted: December 17, 1980 and January 12, 1981

M. J. Oestmann
Inspector: M. J. Oestmann

C. J. Paperiello
Approved by: C. J. Paperiello, Chief
Environmental and Special
Projects Section

2/4/81

2/4/81

Inspection Summary:

Inspection on December 17, 1980 and January 12, 1981 (Report No. 40-501/80-10)

Areas Inspected: A special inspection of a former licensee was conducted to determine the status of this expired license and to carryout an independent survey of the physical facilities used during the time the license was in effect prior to February 28, 1961.

Results: All thorium source material was transferred to the Dow Chemical Company, an authorized recipient, prior to expiration of the license; see completed NRC Form-314. No residual contamination was identified in the areas surveyed.

DETAILS

1. Persons Contacted

James A. Dunbar, Plant Manager, Forging Division, Aluminum Company of America (Alcoa), Cleveland, Ohio
Ralph H. Heller, Engineering Manager, Alcoa, Cleveland, Ohio
Robert L. Garrett, Manager, Metallurgy and Quality Assurance, Forging Division, Alcoa, Cleveland, Ohio

2. Source of Information

Messrs. Dunbar, Heller, and Garrett.

3. Scope of Program

The license authorized use of 1600 pounds of thorium for making roller rings containing magnesium-thorium alloys at the Cleveland, Ohio Alcoa works.

4. Status of Program

Messrs. Dunbar, Heller, and Garrett stated that the licensed material, thorium, was used to make roller rings out of HM21XA ingot (magnesium-thorium alloy) for shipment to the Bendix Corporation in Kansas City, Mo. Prior to expiration of the license on February 28, 1961, all excess thorium was shipped back to Dow Chemical Company, the supplier. A Certificate of Disposition of Materials, NRC Form-314, dated January 8, 1981, certifying disposal of all material was received January 12, 1981. The former licensee does not plan to reactivate this program.

5. Status of Facility Contamination

The inspector performed a closeout survey on December 17, 1980, of the laboratory area, storage area, and ring roller where licensed material was used. Visual inspection, direct radiation measurements, and evaluation of wipes confirmed that all material previously possessed by the licensee had been disposed of in an authorized manner, and that there was no evidence of residual contamination. Direct radiation measurements were made of the radiation field using a micro "R" meter (scintillator), Model PRM-7, Serial 350, calibrated September 24, 1980; a portable alpha counter, Model PAC 1SAGA, Serial No. 1893, Tag No. NRC 662, calibrated December 6, 1980; and a digital exposure rate meter, Model 305B, Serial 07512, Tag No. NRC 7852. No readings above background were noted at the above named areas in the licensee's facility in Cleveland, Ohio.

A total of 14 smears were collected at various areas in Buildings 119, 111, and 107 of the licensee's facility. These were counted for gross

alpha and gross beta activity in the Region III laboratory on December 18, 1980. No significant activity above background was found in any smear. (Results attached.)

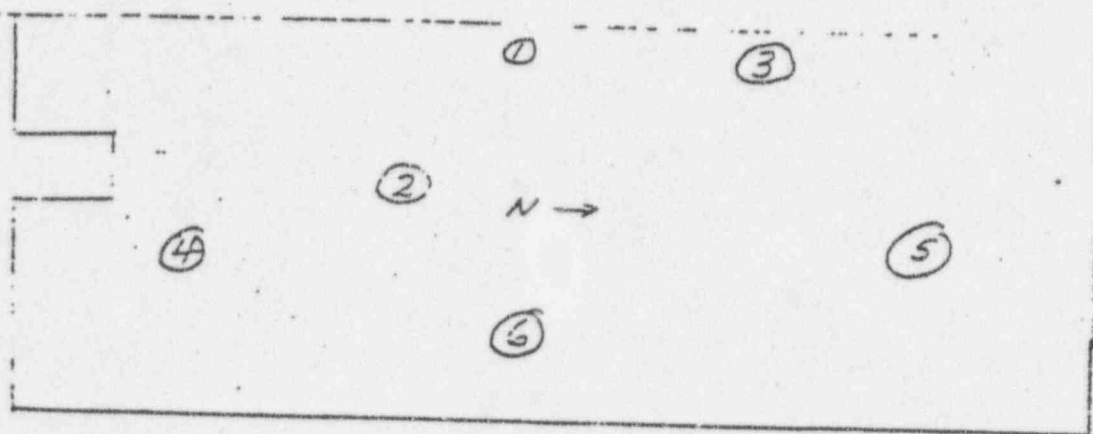
6. Conclusions

Based on visual inspections, direct radiation field measurements, evaluations of smears, discussion with responsible licensee representatives, and on the completed NRC Form-314, dated January 8, 1981, all licensed materials appear to have been disposed of in an authorized manner. No contamination above NRC guidelines was detected. (attached) Therefore, this expired license should be retired.

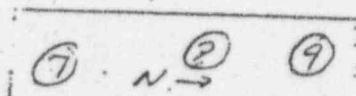
Attachments: As stated

ALCOA SMEAR RESULTS - COUNTED 12/18/80

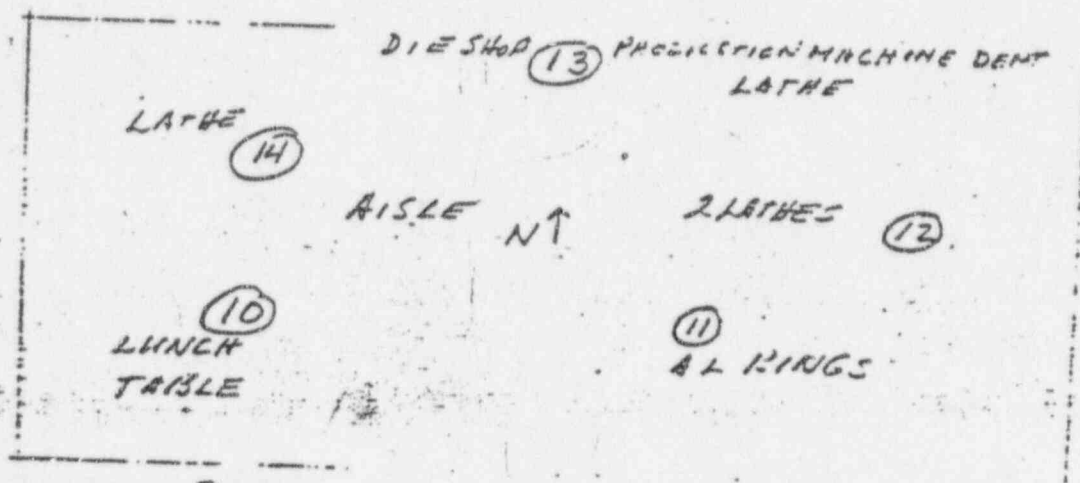
Smear No.	Location - Identification	Results dpm/sample	
		Alpha	Beta
1.	West Wall Stock Storage Bldg. 119	<4	<70
2.	Scale - Bldg. 119	<4	<70
3.	Al ROD - Bldg. 119	<4	<70
4.	Storage Bldg. Floor South -119	<4	<70
5.	Storage Bldg. Floor North -119	<4	<70
6.	Storage Bldg. Floor Center -119	<4	<70
7.	Ring Roller Right Stock Head -111	<4	<70
8.	Ring Roller Center - Bldg. 111	<4	<70
9.	Ring Roller Left Stockhead -111	<4	<70
10.	Lunch Table Bldg. 107	<4	<70
11.	Roller Rings Bldg. 107	<4	<70
12.	Center East End Floor - Bldg. 107	<4	<70
13.	Production Machine Dept. Lab Area -107	<4	<70
14.	Floor B4 Lathe - C12-B12 - Bldg. 107	<4	<70



BLDG 119 STORAGE AREA
OF AL PLATE, PIPE, TAPPING



50 TON RING ROLLER
BLDG 111



BLDG 107 FARMER LABORATORY AREA

ALCOA FORGING PLANT

SHEAR SILVEY 12/17/80

CLEVELAND, OHIO