



Aluminum Company of America

ALCOA RESEARCH LABORATORIES

POST OFFICE BOX 772

KENT R. VAN HORN
DIRECTOR OF RESEARCH

New Kensington, Pa.

March 12, 1962

U.S. Atomic Energy Commission
Division of Licensing and Regulation
Washington 25, D. C.

Attention: Mr. E. R. Price
Assistant Director

Gentlemen:

Reference: LR:RH

In reply to your letter dated February 9, 1962 regarding items of non-compliance with the provisions of 10 CFR, Part 20 noted during the inspection of our facilities on September 28, 1961, we are submitting for your approval the corrective measures which have been or will be applied to fully comply with the regulations.

Corrective action relative to the individual violations cited in your letter is discussed below:

1. Permissible Levels of Radiation in Unrestricted Areas

The source of radiation responsible for the excessive radiation dose existing in the corridor outside the "hot storage room" was traced to a radioactive waste barrel which had been inadvertently stored close to the door. This barrel was transferred to the rear of the room and the radiation dosage was reduced to well below prescribed limits.

2. Radiation Surveys

(a) Office Located Below Room Containing Hot Storage Bin.

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Radiation survey has been conducted in this area. Additional surveys will be made periodically to coincide with changes in the radioisotope inventory in the storage room above.

(b) Strontium-90 Beta Gauge Located in Foil Mill.

Two additional radiation survey meters have been purchased which will offer improved detection sensitivity for soft radiation components as compared to the "Jordan" meter which was previously used in conducting radiation surveys.

(c) Determination of Total Radiation Dose

Arrangements are currently being made to supply each machine operator with a film badge to be worn when using the machine equipped with the Sr-90 Beta Gauge. Film badges will be changed biweekly. Film badge monitoring of the machine operators is expected to commence on April 2.

3. High Radiation Area Existing Above Hot Storage Vault

A four-inch thick steel liner has been installed at one end of the storage vault for storing high activity radioisotopes. This section of the vault is covered by a one-inch thickness of lead.

This modification of the hot storage vault has reduced the radiation dose such that the area can now be classified as a "radiation area", obviating the need for an interlock or warning system.

4. Records of Surveys Conducted During Use of By-product Materials in the Laboratory

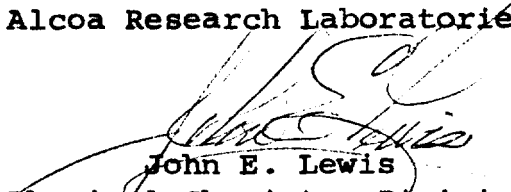
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Personnel have been instructed to record in their laboratory notebook both the activity level and the radiation dosage (at the anticipated working distance) associated with the material in use.

We trust that the remedial measures outlined above will constitute full compliance with 10 CFR, Part 20. We will do our utmost to assure that our activities are being conducted in accordance with the requirements of the regulations.

Very truly yours,

ALUMINUM COMPANY OF AMERICA
Alcoa Research Laboratories



John E. Lewis
Physical Chemistry Division

JEL: jg