

MAY 15 1959

DLR:RGP

Aluminum Company of America  
Aluminum Research Laboratories  
Freeport Road  
New Kensington, Pennsylvania

Attention: Mr. O. E. Procter  
District Purchasing Agent

Gentlemen:

This refers to the inspection conducted on October 28, 1958 of your activities authorized under AEC Byproduct Material License No. 37-7653-2.

It appears that certain of your activities were not conducted in full compliance with the requirements of the AEC's "Standards for Protection Against Radiation," Part 20, and "Licensing of Byproduct Material," Part 30, Title 10, Code of Federal Regulations, in that:

1. No surveys were made in the isotope storage area to evaluate the radiation hazards incident to the evaporation of liquids containing radioactive waste material. This constitutes a violation of Section 20.201(b), "Surveys." The concentrations of radioactive material existing in the air about the open canopy type hood during the evaporation process were not determined to assure compliance with Section 20.101(b), "Exposure of individuals in restricted areas." Also, no determination was made of the concentrations of radioactive material in the hood exhaust to determine compliance with Section 20.103(b), "Concentrations in effluents to unrestricted areas."

Although surveys were conducted in the isotope storage room and in the chemistry laboratory in Building 44, to evaluate levels of radiation, no

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surveys were made to determine possible levels of contamination in these areas as required by Section 20.201, "Surveys."

2. The laboratory in Building 29 in which approximately 10 millicuries of Hydrogen 3 were stored, the tritium laboratory in Building 29 in which approximately 20 curies of Hydrogen 3 were stored and used, and the isotope storage room where millicurie quantities of byproduct material were stored were not posted as required by Section 20.203(e)(1), "Caution signs, labels and signals."
3. The following containers of byproduct material were not labeled as required by Section 20.203(f)(1) and (f)(4), "Caution signs, labels and signals:"

The can containing about 10 millicuries of Hydrogen 3 located in a laboratory of Building 29; the gas handling system containing approximately 20 curies of Hydrogen 3 located in the tritium laboratory in Building 29; the drums of radioactive waste located in the isotope storage room; and the 13 millicurie Strontium 90 beta gauge located in the foil mill.

4. The byproduct material containers located behind the 12-inch brick wall in the isotope storage room were not labeled as required by Section 20.203(f)(4), "Caution signs, labels and signals."
5. Records showing the results of surveys made in the radioisotope laboratories and in the isotope storage room were not maintained as required by Section 20.401(c), "Records of survey, radiation monitoring and disposal."

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- 6. Records showing the transfer and disposal of byproduct material were not kept as required by Section 30.41(a), "Records." Although shipment records were maintained, these did not specify the quantities of radioactive material involved.

Pursuant to the provisions of Section 2.201(a), "Notice of violation," of the AEC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, you are requested to notify this office, within thirty days of your receipt of this notice, of the steps taken or to be instituted to achieve correction of the above-described violations and the date when such correction has been or will be achieved.

Enclosed is a sample sign containing the coloring, wording and symbol which meets the requirements of Section 20.203(e)(1) and (f)(1). Signs more suitable for posting and labeling might be procured from your radioisotope supplier or a commercial sign company.

Very truly yours,

cc: Inspection Division, Wash.  
 Inspection Division, NYOO  
 Public Document Room

James R. Mason, Chief  
 Isotopes Branch  
 Division of Licensing  
 and Regulation

Enclosures:

- 1. 10 CFR Part 20
- 2. 10 CFR Part 30
- 3. 10 CFR Part 2
- 4. Sign "Caution - Radioactive Materials"

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