

Marvin M. Mann, Assistant Director
Division of Inspection, Headquarters

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Robert W. Kirkman, Director, Inspection
Division, NYOO

TRANSMITTAL OF LICENSE COMPLIANCE INSPECTION REPORT - 10 CFR 30

SYMBOL: INS:BLH

Transmitted herewith is the following inspection report
involving noncompliance:

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

License No. 37-7653-2

The following items of noncompliance which were noted during
the course of this inspection were brought to the attention of
Mr. John Lewis, R.S.O., who stated that he is willing to take
any corrective measures required by the Commission:

20.201 "Surveys"

✓ (b) - in that (1) no evaluation has been made of the con-
centration of radioactive material in the exhaust air from
the hood in the isotope storage area or of the concentration
of radioactive materials in the air in the storage area
during operations involving the evaporation to dryness of
liquids containing radioactive waste material, and (2) the
surface contamination surveys presently performed by the
licensee are not sufficiently complete to detect the
presence of contamination in the isotope storage room or
in the chemistry laboratory in Building 44. (See Item 11.b.
of report details.)

20.203 "Caution signs, labels, and signals"

✓ (c)(1) "Additional requirements" - in that a laboratory
containing approximately 10 millicuries of tritium, a labor-
atory containing approximately 20 curies of tritium, and

(continued)

✓ the isotope storage room containing millicurie amounts of radioisotopes were not posted with the words, "Caution - Radioactive Material" and the standard radiation symbol. (See Item 14 of report details.)

(f)(4) "Containers" - in that a drum containing approximately 10 millicuries of radioactive waste material, in one of the tritium laboratories, although labeled "radioactive", was not labeled with the words, "Caution - Radioactive Material", a standard radiation symbol, and the type, assay, and date of assay of materials contained therein. (See Item 14 of report details.)

✓ - in that the hood housing the tritium gas handling system containing approximately 20 curies of tritium, although labeled, "Danger - Radioactivity" and displaying a standard radiation symbol, was not labeled with the words, "Caution - Radioactive Materials", or the type, assay and date of assay of materials contained therein. (See Item 14 of report details.)

(F)(4) only
- in that containers of radioactive material stored in the isotope storage room, although labeled with the words, "Caution - Radioactive Material", the radiation symbol, the date, and type of material contained therein, were not labeled with the assay of materials contained therein. (See Item 14 of report details.)

✓ - in that drums of radioactive waste material stored in the isotope storage room, although labeled with the word, "Radiation", were not labeled with the type, assay or date of assay of materials contained therein. (See Item 14 of report details.)

✓ - in that the 13 millicurie strontium-90 beta gauge, although labeled with the words, "Radiation Hazard" and the radiation symbol, was not labeled with the words, "Caution - Radioactive Material" and the type, assay and date of assay of materials contained therein. (See Item 14 of report details.)

20.401 "Records of surveys, radiation monitoring, and disposal"

(b) "Records of survey results" - in that the licensee has not maintained records of surveys conducted in the isotope

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storage room and isotope handling laboratory. (See Item 16 of report details.)

(b) "Records of waste disposal" - in that although the licensee maintains records of the shipment of radioactive materials, these records do not show the quantities of radioactive material. (See Item 16 of report details.)

We feel that essentially no hazard exists from the posting, labeling, and record-keeping deficiencies in the licensee's operation. We feel that some hazard is entailed from the licensee's failure to make adequate surface contamination and air surveys.

We would like to point out that the adequacy of the canopy-type hoods utilized by the licensee for work with radioactive materials is questionable from a radiation safety standpoint.

We recommend that Dr. L. M. Foster, Chief, Physical Chemistry Division, be sent a letter with a copy to Mr. John Lewis, R.S.O., requiring correction of all items of noncompliance. In addition, we recommend replacement by the licensee of the canopy-type hoods with enclosed hoods in order to minimize spread of airborne contamination. We recommend a follow-up inspection.

Enclosure:
Insp. rpt. (4 cys.)