UNITED STATES
ATOMIC ENERGY COMMISSION
DIVISION OF COMPLIANCE
REGION I
970 BROAD STREET
NEWARK, NEW JERSEY 07102

201 645-3962

July 7, 1971

Paul R. Nelson, Senior Radiation Specialist
Region I, Division of Compliance

INSPECTOR'S EVALUATION
ALUMINUM COMPANY OF AMERICA
ALCOA RESEARCH LABORATORIES
P.O. BOX 772
NEW KENSINGTON, PENNSYLVANIA
LICENSE NO. 37-07653-02

Re: Letter, Robert Geiger, Alcoa, to Director, DML with attached survey report, dated June 18, 1971.

A review of the procedures, survey results, and the criteria showed that radiation levels, smearable contamination and fixed contamination, as reported in the survey, are within the levels established in "Guidelines For Decontamination Of Facilities And Equipment Prior To Release For Unrestricted Use", dated April 22, 1970.

One question relative to the need for a survey for H-3 contamination was resolved in a telephone conversation with Robert Geiger, RSO, on July 7, 1971. Geiger stated that H-3 had been used seven or eight years ago in small mCi amounts and limited to one hood area. He stated that surveys had been made when use was discontinued and no contamination found.

Based on the above information, survey results, and a review of inspection reports, the writer concludes that the survey report is representative of the condition of the facility, and a closeout survey by CO:I is not necessary. This was so communicated, by telephone, to J. R. Metzger, CO:HQ, on July 7, 1971.

Ralph J. Meyer
Ralph J. Meyer
Radiation Specialist

B-5

March 19, 1971

Paul A. Nelson, Senior Radiation Specialist
Region I, Division of Compliance

Inspection Excerpts

Aluminum Company of America
Alcoa Research Laboratories
P.O. Box 772
Freeport Road
New Kensington, Pennsylvania 15068
License No. 37-07653-02

The licensed program has been unused since the last inspection. Currently one chemist spends about 10% of his time performing non-destructive testing studies using radioisotopes. Only two density gauges employing sealed sources are being used.

There were no apparent health and safety hazards. It is recommended that the time for reinspection be extended by nine months to August 1972. The license has been categorically classified as E(1-A) II.

Phillip C. Jerman

REGION I, DIVISION OF COMPLIANCE
NEWARK, NEW JERSEY

~~SPECIAL INTERIM INSPECTION~~

1. Name and address of licensee:

Aluminum Company of America
Alcoa Research Laboratories
P.O. Box 772
Freeport Road
New Kensington, Pa. 15068

2. Date of Inspection: 2/11/71

3. Type of Inspection: Announced Reinspection

4. License number(s), docket number(s), number and date of last amendment for each license. Category and Priority of each license:

License No. 37-07653-02
Amendment No. 2 dated 2/1/71
Category E(1-A). Priority II

5. Date of previous inspection: ~~None~~ 4/29/68 J.P. [illegible]

6. Is "Company Confidential", or proprietory, or classified information contained in report?

Yes _____ No X

(Specify paragraphs)

7. Scope of inspection:

8. Phillip C. DeMan — Inspected by
March 19, 1971 — Date of Report

Eugene Geller Jr. — Reviewed by GRN
10/21/71 — Date of Review

Licensee: _____

Summary

The program has been implemented in a manner. [illegible] The inspection [illegible] Instrumentation.

Noncompliance and Safety Items

Contrary to Licensee Order [illegible] 15.4, necessary leak test results were not submitted for inspection to the Commission. (See paragraph M)

Unusual Occurrences

None reported or observed [illegible]

Status of Previously Reported Noncompliance or Safety Items

Item 3.91 was closed.

Management Interview

The interview was conducted with Mr. George Varady, Head, Industrial Hygiene [illegible] in the presence of Licensee [illegible] the results [illegible] and in the future records of leak test results [illegible] maintained.

Licensee: _____

DETAILS

A. **Participants**

Pennsylvania Dept of Health notified but no one appeared
Robert C. Geiger, RSO.
George Farrah, Head, Industrial Hygiene Laboratory.

B. **Scope of Licensee Program**

The tracer work has continued at a very slow pace. This is done at the Research Laboratory. In addition, sealed sources are used at various locations in the USA.

C. **Organization**

Geiger stated he had been transferred to the Industrial Hygiene Division effective [illegible]. He stated he reports to George Farrah, Head Industrial Hygiene Operation which is at the Nuclear Fuel Facility. Farrah in turn reports to T.B. Bonney, Chief Industrial Hygiene for the Corporation.

D. **Administrative Control**

Geiger stated the Quarterly Committee is composed of T.B. Bonney, Chairman, C.N. Cochran, Head, Physical Chemistry Dept, and himself as secretary and R.S.O. Geiger stated he is spending most of his time with the R.S.O. function. All three members of the Quarterly Committee are at

Licensee: _____

E. Use of Material

Berger stated that [illegible] the last inspection. The [illegible] points of the last inspection and violations were considered at the last exit [illegible]. Records showed that the following materials were received.

9/24/68	1.028 Ci P-32
10/30/68	[illegible] Ci P-32
5/[illegible]/70	[illegible] Ci P-32
9/29/70	400 mCi Zn-65

[illegible] the three [illegible] remaining [illegible]. Berger stated that [illegible] Pm-147 [illegible] and Sr-90 and Cs-137 sealed sources in [illegible] are Kr-85 and Cs-137 in density gages.

F. Facilities

Berger stated the facilities had not changed [illegible] since the previous inspection. He was [illegible] in which [illegible] were done. The only [illegible] Berger stated [illegible] consisted in the calibration of [illegible] of Zn-65 and P-32 which were used [illegible] and approximately 1 mCi. Offhand [illegible] in which radioactive waste material and [illegible] were stored.

Licensee: _____

G. Equipment

Geiger stated that all important material was handled in a hood in the two or [illegible]. It was noted that the source materials were present [illegible] were observed for their previous inspection.

H. Radiological Safety Procedures

Geiger showed the licensee. He stated the conformance to Title 10 of the Code of Federal Regulations. He stated that the applicable procedures for use of materials at [illegible] locations. Geiger stated the procedures for use of materials at the Mare Island facility had been in effect for some time. He stated that when the KW-85 source was supplied to the facility at East Longmont, then the person who went there was instructed in the safe use of the gauge. AEC-3 forms were sent in the trailer [illegible]

Licensee: _____

I. **Personnel Monitoring and Exposure to External Radiation**

[illegible] stated that Seager maintained [illegible] AEC-3 on personnel. Film badges were supplied by [illegible] Dosimetry [illegible] and monthly [illegible] 1968 the [illegible] exposure was received by [redacted] whose maximum quarterly doses were 1150 mrem in 1968 and 690 mrem in 1969. All other exposures were insignificant. 8X6

J. **Exposure of Employees to Concentrations of Radioactive Materials**

Seager stated that [illegible] radioactive [illegible] in the air study were [illegible] limited to Zn-65 and P-32. The P-32 [illegible] were mainly allowed to decay [illegible] which were [illegible] and involved [illegible] amounts less than 100 uCi. Many [illegible] personnel [illegible].

K. **Effluents to Unrestricted Areas**

Seager stated that the amount of byproduct material in effluents to unrestricted areas was nil for the same reasons stated in J above.

Licensee: _____

L. Disposals

Geiger stated that radioactive waste was collected, stored and then [illegible] to Nuclear Engineering Co. [illegible] the last shipment was made on [illegible] and the [illegible] in 1969. We recorded [illegible] identification [illegible] to identify and [illegible].

M. Miscellaneous Surveys, Evaluations and Records

[illegible] the only surveys which have been performed are in the tracer lab. Geiger stated that Jack does this routinely by taking instrument readings and wipes. [illegible] the surveys were made monthly to quarterly. Geiger stated that the frequency of surveys and records [illegible] upon the amount of work being done. He [illegible] some surveys were [illegible] There work was done in the rooms, but results were negligible. other

N. Special License Conditions

The license conditions were reviewed with Geiger and found to be complied with [illegible] for the proper maintenance. Lab tail records are indicated in the graph M above.

Geiger stated and records verified that the only locations where [illegible] is possible and needs are [illegible] laboratories, Vineyard [illegible] Gail Co., [illegible] and [illegible], Pa. Geiger stated no tracer studies have been performed since the last inspection.

Licensee: _____

O. Posting and Labeling

[illegible]

P. Independent Measurements

[illegible]

Q. Operations Observed

None.

Licensee: _____

R. Incidents, Overexposures, Theft or Loss, Equipment Malfunction

[illegible]

S. Other information or continuation from previous paragraphs.

[illegible] 5/5/79, it was noted that [illegible] to the supplier, but no certificate of leak test were available. [illegible] 23 to the licensee [illegible] 11/81 [illegible] from one month to 3 years. [illegible] due to changes in personnel [illegible] recommended to locate the [illegible] test records.

VENDOR NO	PO NUMBER	PO DATE	REQ NO	DELIVERY REQUIRED				
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]
[illegible]
[illegible]
[illegible]

SHIPPER	PRE PRICE AMT	PRE SHIP [illegible]	[illegible]
SHIPPING POINT [illegible]	LESS TRANS AMT.	PRT LIST NO	DATE PASSED
VIA [illegible]	NET AMOUNT	TAX AMOUNT	CR GO TO ACC'T
PRO NO 522-1672	INVOICE AMOUNT	INVOICE LIST NO	DATE PASSED
CAR NO PPD	ADJ	ADJ. TO ACC'T NO	DR CR
CAR SEALS	WORK ORDER	ACCOUNT NO	MAT'L VALUE / FREIGHT

[illegible]
[illegible]
[illegible]
[illegible]

SHIP TO
[illegible]
[illegible]
[illegible]
[illegible]

SHIP VIA	F.O.B.	TERMS	AUTH NO
[illegible]	[illegible]	[illegible]	

ITEM NO	QUANTITY	UNIT MEAS	DESCRIPTION AND SPECIFICATIONS	PRICE	CODE	F/C	QUANTITY RECEIVED	PRE-PRICE AMOUNT
1	6		[illegible]			2	1	
			SERIAL # 11					
			[illegible]					
			[illegible]					
			[illegible]		[illegible]			
			[illegible]		[illegible]			
			[illegible]					

#1

MISCELLANEOUS RECEIVING REPORT

SHIPPER	PRE PRICE AMT.	PRICED BY	DELIVER TO

SHIPPING POINT	LESS TRANS. AMT.	FRT. LIST NO.	DATE PASSED

VIA	NET AMOUNT	TAX AMOUNT	CH'GD TO ACCT.

PRO NO.	INVOICE AMOUNT	INVOICE LIST NO.	DATE PASSED

CAR NO.	ADJ	ADJ. TO ACC'T NO.	DR. CR

CAR SEALS	WORK ORDER	ACCOUNT NO.	MAT'L VALUE	FREIGHT

	P/C	QUANTITY RECEIVED	PRE-PRICE AMOUNT

#2

COMPANY NAME

VENDOR NO.	P.O. NUMBER	P.O. DATE	REQ'N NO	DELIV. REQUIRED	M'L. ORIG. REC. ON MRR	SHIP'T. PROMISED
		5-25-69				

REQUESTED BY

DEPARTMENT

MISCELLANEOUS SHIPPING ORDER

SHIP TO

ALUMINUM COMPANY OF AMERICA
ATTENTION: MR. WILLIAM N. KELLEY, JR.
WESTERN E. PLOMATION OFFICE
4700 NORTH 12TH ST. [redacted] SUITE ENF
PHOENIX, ARIZONA 85014

SAME

REASON FOR SHIPMENT		SHIPMENT CONSISTS OF		
SOLD		NO. OF CONTAINERS		WEIGHT
NOT AS ORDERED			BOXES	
ORDERED IN ERROR		1	CARTONS	50
TO BE REPAIRED			PIECES	
RETURN FOR CREDIT			DRUMS	
TRADE-IN			CRATES	
OTHER (SEE NOTE *)			SKIDS	

APPROVED BY

LOCATION OF MATERIAL

DATE SHIPPED	B/L NO.	CAR NO.
5-29-69	03700	

CARRIER

INVOICE NO. DATE

CREDIT ACCT.

PRICED BY DATE

FREIGHT AMT.

FREIGHT LIST

CHARGE FRT. TO

TO BE RETURNED TO US: YES X NO

MRR DATE AND NUMBER

SHIP VIA: AIR EXPRESS PREPAID

F.O.B.: DESTINATION

TERMS:

AUTH. NO.

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE	CODE	B/O	QUANTITY SHIPPED	VALUE
	1		TEXAS NUCLEAR PORTABLE ANALYZER MODEL 469 $4500.00 "RADIOACTIVE MATERIAL" PU 238 - 30 M CI	N/C				
			*RENTAL INSTRUMENT - ON LOAN TO RAW MATERIALS DIVISION					
	EMK							

(3)

ALUMINUM COMPANY OF AMERICA
Western Exploration Office
P. O. Box 16026
Phoenix, Arizona - 85011

ALCOA

June 23, 1969

Mr. Robert Geiger
Alcoa Research Laboratories
P. O. Box 772
New Kensington, Pa.

Dear Bob:

I am sending today the X-ray Analyzer with source to Peter Berry of the Texas Nuclear Corporation in Austin Texas. He will hopefully iron out the bugs in our instrument. I am sending it just the way I received it, packed and locked in the crate, and via Air Express. Everything should be in order.

For your information we have not yet been examined by the A.A.E.C.

Sincerely,

William N. Kelley, Jr.

William N. Kelley, Jr.

WNK:vg

*4

TEXAS NUCLEAR CORPORATION
A Division of Nuclear-Chicago Corporation
9101 HIGHWAY #183
P. O. Box 9267 Northwest Station
AUSTIN, TEXAS 78757

INVOICE DATE: 8-13-69

INVOICE NO.: II-10087

TERMS: NET 30 DAYS

SOLD TO:
SHIPPING MEMO ONLY
Aluminum Company of America
Alcoa Research Laboratories
Freeport Road
New Kensington, Pa. 15068

SHIPPED TO:
Aluminum Company of America
Mr. Bill Kelly
Western Exploration Offices
P. O. Box [illegible]
Grants, New Mexico [illegible]
SHIPPING MEMO

II-10087

CUSTOMER NO.	SALES ORDER NO.	SALES CODE	STATE	CITY	CUST.	CUSTOMER ORDER NO.	CUST. ORDER DATE	A.E.C. AUTHORIZATION NO.
[illegible]	[illegible]	[illegible]	[illegible]			[illegible]		

ORDERED	SHIPPED	UNIT PRICE	AMOUNT
1	1		N/C

RETURN OF CUSTOMER PROPERTY
(Portable Analyzer, S. N. 11 with Probe S. N. 4)

#5

DATE SHIPPED	SHIPPED VIA		PPD.	COLL.	FACT.	DEST.	
8-12-69	Air Express	87-76-86	X			X	PAY THIS AMOUNT ▷ $ N/C

INVOICE COPY

ISE, CONSUMPTION, COMPENSATING AND SIMILAR TAXES ARE NOT INCLUDED IN THE ABOVE PRICE, UNLESS SPECIFICALLY STATED AS A SEPAR-TE ITEM. IF THESE TAXES ARE NOT SO STATED, BUYER ASSUMES RESPONSIBILITY FOR ANY SUCH TAXES APPLICABLE TO THIS TRANSACTION.

VE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL THE APPLICABLE REQUIREMENTS OF SECTIONS 6, 7 AND 2 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED, AND ALL REGULATIONS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR ISSUED UNDER SECTION 14 THEREOF.

ALL CLAIMS MUST BE MADE WITHIN 10 DAYS AFTER RECEIPT OF GOODS

VENDOR NO.	P.O. NUMBER	P.O. DATE	REQ. NO.		
	NR 90714	12-2-69			ED SENSOR

MISCELLANEOUS SHIPPING ORDER

PURCHASING

NO BILLING

SHIP TO:

TEXAS NUCLEAR CORPORATION
9101 HIGHWAY 183
BOX 9267
ALLANDALE STATION
AUSTIN, TEXAS 78756
ATTENTION: J. R. ~~XX~~ RHODES

REASON FOR SHIPMENT: X

SHIPMENT CONSISTS OF: LOAN 50 LB

SAME

DATE SHIPPED: 12 8 69 13:44

CARRIER: CHISOL FRTNO PPD

TERMS: X

SHIP VIA		F.O.B.
BEST WAY	PREPAID	DESTINATION

ITEM NO.	QUANTITY	UNIT MEAS	DESCRIPTION AND SPECIFICATIONS	PRICE	QUANTITY SHIPPED
	1		X-RAY ANALYZER	N/C	
	1		#881190 SOURCE UNIT	N/C	
			Pu-238 source included		
			Pm-147 source		
			RETURNING THEIR PROPERTY; HAD BEEN HERE ON LOAN.		
	EK				
	#6				

AARC-3
Jun. 1967

ARIZONA ATOMIC ENERGY COMMISSION
RADIOACTIVE MATERIAL LICENSE

Pursuant to Chapter 4, Title 30, Arizona Revised Statutes, and the Arizona Atomic Energy Commission Regulations for the Control of Ionizing Radiation, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material designated below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders now or hereafter in effect and to any conditions specified below.

Licensee	
1. Name	Aluminum Company of America Alco Research Laboratories
2. Address	Freeport Road New Lensington, Pennsylvania P. O. Box 772
3. License number	15-18
4. Expiration date	April 30, 1972
5.	

6. Radioactive material (element and mass number)	7. Chemical and/or physical form	8. Maximum quantity licensee may possess at any one time
A. Plutonium-238	A. Sealed Service (Radio Chemical Centre Model PPC-5)	A. One (1) source not to exceed 30 millicuries

9. A. To be used in Texas Nuclear Corporation Model 465 Analyzer for x-ray Fluoresence studies.

CONDITIONS

10. The authorized place of use includes temporary job sites of the licensee throughout Arizona.

11. The licensee shall comply with the provisions of Part C, "Standards for Protection Against Radiation" of Arizona Regulations for the Control of Ionizing Radiation.

12. Radioactive material shall be used by, or under the supervision of Robert C. Geiger.

13. Sealed sources containing radioactive material shall not be opened.

14. A. Each neutron source shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer the sealed source shall not be put into use until tested.

    B. The test shall be capable of detecting the presence of 0.005 microcurie of removable alpha contamination on the test sample. The test sample shall be taken from the neutron source or from appropriate accessible surfaces of the device in which the sealed source is permanently or semipermanently mounted or stored. Records of leak test results shall be recorded in microcurie units and maintained for inspection by the Arizona Atomic Energy Commission.

#7

ARIZONA ATOMIC ENERGY COMMISSION

RADIOACTIVE MATERIAL LICENSE

SUPPLEMENTARY SHEET

License Number 15-18

C. If the test reveals the presence of 0.005 microcurie or more of removable alpha contamination, the licensee shall cause it to be decontaminated or to be returned to the manufacturer. A report describing the equipment involved, the test results, and the corrective action taken shall be filed within five (5) days of receipt of the test results with:

Arizona Atomic Energy Commission
Suite #107, 40 East Thomas Road
Phoenix, Arizona 85012
Attention: Chief, Radiation Control

15. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 7, and 8 of this license in accordance with statements, representations and procedures contained in application dated April 10, 1969 signed by C. Norman Cochran.

Dated

April 21, 1969

Donald C. Gilbert
Assistant Director
Chief, Radiation Control

[illegible]

Tucson, Arizona [illegible]

[illegible]

RE: PORTABLE X-RAY ANALYZER

Evaluation of the X-Ray Analyzer has been wrought with problems from the outset. Much of our original work was of little value when it was discovered that the instrument had developed a significant negative drift. The instrument was shipped back to Texas Nuclear Corporation for repair and adjustment, [illegible] was received by us on August 11th. Unfortunately Texas Nuclear had adjusted the instrument such that the original calibration curves drawn by AHL were invalid. An attempt to fit the data to the original calibration curves by varying the threshold and upper level settings failed. Time did not permit a complete recalibration of the instrument but a new calibration curve was made so that we could finish our evaluation.

The instrument was not used in the field, however, field conditions were easily simulated in the office by [illegible] samples and preparing them with a [illegible]

A study was made to determine how [illegible] of a sample was required [illegible] portions of seven samples were [illegible] finely ground as fine as [illegible] and -200 mesh.) As was expected the [illegible] obtained from the -4 mesh [illegible] mesh fraction. [illegible]

One favorable aspect of the analyzer [illegible] Copper sulfide [illegible]

[illegible]

#8

#9

TEC - 37-07653-03

LICENSEE = A.R.L. & Arizona LICENSE NO. = AAEC - 15-18

GAUGE LOCATION = Anal. Chem. Div. & Western Exploration office Phoenix, Arizona

INDIVIDUAL USER = Dr. R.A. Kramer (ARL) and William Kelley (Arizona

ISOTOPE = Pu-238 QUANTITY = 30 mc

SOURCE MODEL NO. = PPC-5 (Radiochemical Centre) S/N =

SOURCE HOLDER MODEL NO. = S/N =

DETECTOR UNIT MODEL NO. = S/N = Rental

GAUGE SERIES = MODEL = 465 TYPE =

USE = Portable X ray analyzer X-Ray Fluorescence Studies (Cu)

VENDOR = Tracor Nuclear Corp. PO NO. = NR-90714

#-10

LICENSEE = PRL LICENSE NO. = 37-07653-02

GAUGE LOCATION = Analy. Chem. Div.

INDIVIDUAL USER = Dr. R. A. Kramer

ISOTOPE = Pm-147 QUANTITY = 500 mc

SOURCE MODEL NO. = PHX-7 S/N =
(Radiochemical Centre)

SOURCE HOLDER MODEL NO. = S/N =

Rental

DETECTOR UNIT MODEL NO. = S/N =

GAUGE SERIES = MODEL = 465 TYPE =

USE = Portable x-ray analyzer
x-ray fluorescence studies (tin)

VENDOR = Texas Nuclear Corp PO NO. = NR-90714

MISCELLANEOUS RECEIVING REPORT

SHIPPER'S GROSS WEIGHT	OUR GROSS WEIGHT	RECEIVED BY	REC'D BY	DATE RECEIVED	M.R.R. NO.
				5/5	76832

P.O. NO.	BUYER	P.O. DATE	REQ'N NO.	DEL'Y REQUIRED	SHIP PROMISED
[illegible]		5-21-70	510000	6-5-70	6-6-70

TEXAS NUCLEAR CORPORATION
C/O RECO-INTERNATIONAL CO., INC.
[illegible] WASHINGTON ROAD
PITTSBURGH, PA. 15241

AMERICAN COMPANY OF AMERICA
[illegible] FERRY PLANT
[illegible] KENSINGTON, PA. 15068

24

SHIPPER	PRE-PRICE AMT.	PRICED BY	CHECKED BY

SHIPPING NOTE	LESS TRANS. AMT.	FRT. LIST NO.	DATE PASSED

VIA	NET AMOUNT	TAX AMOUNT	CH'GD TO ACC'T
Thru Press	17750		

PRO NO.	INVOICE AMOUNT	INVOICE LIST NO.	DATE PASSED
—			

CAR NO.	ADJ.	ADJ. TO ACC'T NO.	DR. / CR.

CAR SEALS	WORK ORDER	ACCOUNT NO.	MAT'L VALUE	FREIGHT

unbilled

SHIP VIA	F.O.B.	TERMS	AUTH. NO.
YOUR DISPOSITION	[illegible]	NET 30	K-[illegible]

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE	CODE	P/C	QUANTITY RECEIVED	PRE-PRICE AMOUNT
			SERVICES OF A QUALIFIED AND SPECIFICALLY LICENSED PERSON TO ASSIST IN THE INSTALLATION AND START UP OF A TEXAS NUCLEAR GAUGE PURCHASED ON CO. ORDER P-[illegible].	$17.00 HR PLUS TRAVEL AND LIVING EXPENSES	181191			17750
				17750				Services
			[illegible] VERBAL ORDER OF MR. R. MOELLER.					
			[illegible] VERSION (2) ON THE BACK PERTAINING TO [illegible] TO AMERICAN COMPANY OF AMERICA, P.O. BOX 1, NEW KENSINGTON, PENNSYLVANIA. 15068.					
			THIS ORDER IS NOT SUBJECT TO THE RENEGOTIATION ACT OF 1951.					
			THIS ORDER SUBJECT TO ACCEPTANCE. ACCEPTANCE MUST BE SENT AND [illegible] TO MR. R. W. ANDERSON BEFORE PROCEEDING WITH THE ABOVE WORK.					
			THIS PURCHASE ORDER IS ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS					
			ARRIVED IN PERFECTION DAY OF		19			

Work Completed

#11

P.O. NUMBER	BUYER	DATE	REQ'N NO.	DEL'Y REQUIRED	SHIP PROMISED
P[illegible]-[illegible]		12-3-7[illegible]	52 [illegible]	NOTE A	NOTE A

ALL SHIPMENTS, SHIPPING PAPERS AND CORRESPONDENCE MUST BE IDENTIFIED WITH OUR PURCHASE ORDER NUMBER. INVOICES RENDERED AGAINST THIS ORDER MUST BE IN CONFORMANCE WITH INSTRUCTIONS PRINTED ON THE BACK HEREOF

TEXAS-NUCLEAR DIV. OF NUCLEAR-CHICAGO
C. O RICE-PITTSBURGH CO., INC.
1725 WASHINGTON ROAD
PITTSBURGH, PA. 15241

SHIP TO
ALUMINUM COMPANY OF AMERICA
MAIL P. O. BOX 545
NEW KENSINGTON, PA. 15068
FREIGHT LEGRAND FERRY, PA.
19[illegible]

SHIP VIA	F.O.B.	TERMS	AUTH. NO.
U.S. MAIL	SHIPPING POINT	NET 30 DAYS	

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE	CODE NUMBER
			SUCH LEAK TEST SERVICE AS MAY BE REQUIRED BEGINNING DEC. 20, 1971 AND CONTINUING AT 6 MONTH INTERVALS UNTIL FURTHER NOTICE FOR MODEL 5120 DENSITY GAUGE WITH 20 MCi CESIUM 137 SOURCE FURNISHED PER P. O. NO. P[illegible] DATED 8-[illegible]-[illegible]. LEAK TESTING SERVICE IS TO INCLUDE:		043467
1			LEAK TEST KIT WITH INSTRUCTION MANUAL.		
2			AUTOMATIC NOTIFICATION WHEN NEXT LEAK TEST IS DUE.		
3			WRITTEN TEST REPORTS AFTER EACH TEST.		
4			PERMANENT RECORD MAINTENANCE	$25.00 PER LOT TEST	

NOTES
A. DELIVERY REQUIRED EACH 6 MONTHS, BEGINNING DEC. 20, 1971.
SHIPMENT PROMISED AS REQUIRED.

RMS NOD DIV.

- CONTINUED ON PAGE 2 -

P & P DIV. - DENSITOMETER SERVICE

service

#12

ALUMINUM COMPANY OF AMERICA
XXXXXXXXXX
VICE PRESIDENT PURCHASE

R. W. STOMPAY, PURCHASING AGENT
1501 ALCOA BUILDING
PITTSBURGH, PA. 15219

SF 5302 REV. 11-69-85M-11-69

COPY 6

ALUMINUM COMPANY OF AMERICA

P. O. BOX 772 · NEW KENSINGTON, PA.

ALCOA RESEARCH LABORATORIES

ALCOA

March 12, 1969

U. S. Atomic Energy Commission
Division of Licensing and Regulations
Isotope Branch
Washington, D. C.

Re: By-Product Material License No. 37-07653-02

Gentlemen:

This is to advise that effective March 1, 1969, Dr. P. T. Stroup retired and we hereby give notice of his resignation as Isotope Committee Chairman in connection with the captioned license.

We are submitting for your approval the name of Dr. A. S. Russell as the person who will assume the duties of Isotope Committee Chairman.

Dr. A. S. Russell, Assistant Director of Research of the Alcoa Research Laboratories, succeeded Dr. P. T. Stroup at that position. Dr. Russell had previously administered the radioactive tracer program at Alcoa. In his new position, Dr. Russell will have responsibility for directing all tracer and gauging activities in the Aluminum Company of America.

If further information is needed, please call on me.

Robert C. Geiger

ROBERT C. GEIGER
Physical Chemistry Division

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