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
Radiation Specialist

March 19, 1971

Paul A. Nelson, Senior Civilian Health Physicist
Region 1, Division of Compliance

Subject: Site Inspection
Aluminum Company of America
Alcoa Research Laboratories
P.O. Box 772
Location: New Kensington, Pennsylvania
Docket No. 37-07653-02

The licensed program has been reviewed since the last inspection. Currently one chemist spends about 10% of his time performing wet chemical analyses using radioactive tracers. Only two density gauges employing sealed sources are being used.

There were no apparent health and safety hazards. It is recommended that the next routine inspection be scheduled within six months to August 1972. The license has been categorized Classification as E(1-A)II.

Phillip C. Jerman

REGION I, DIVISION OF COMPLIANCE
NEWARK, NEW JERSEY

~~SPECIAL NOTED INSPECTION~~

1. Name and address of licensee:

Allegheny Company of America
Alcan 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. Stohr

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 — Inspector — March 19, 1971 — Date of Report

Eugene Gallen Jr. — Reviewed by GRM — 10/21/71 — Date of Review

Licensee: _____

Summary

The program was found marginally adequate. Areas of strength were identified. Violations were identified. Enforcement action is recommended.

Noncompliance and Safety Items

Contrary to Section [illegible] of the [illegible], as specified by [illegible] of the Commission's regulations (see paragraph M)

Unusual Occurrences

None reported or observed.

Status of Previously Reported Noncompliance or Safety Items

None [illegible] noted.

Management Interview

The management interview was conducted with Mr. George Varnadoe, Nuclear Technologist, at the conclusion of the inspection. Licensee representatives acknowledged the findings presented. It was noted that [illegible] and in the future records of leak tests will be maintained.

Licensee: _____

DETAILS

A. Participants

Pennsylvania Dept of Health notified but no one appeared
Robert C. Geiger, RPSO.
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

George Farrah is head of the Industrial Hygiene Laboratory. He is responsible to Dr. Harold Hagan, Director of Research, who is at the Harrisburg facility. Farrah in turn reports to T.B. Bonney, Chief Industrial Hygiene for the Corporation.

D. Administrative Control

George Farrah is a member of the Safety Committee in charge of T.B. Bonney. Chairman C.N. Cochran, Head, Physical Chemistry Dept, and three other members, and R.S.O. George Farrah. It appears that in this case with the R.S.O. function. All five members of the Safety Committee are at

Licensee: _____

E. Use of Material

[illegible] 6/24/65 1.028 Ci Sr-90
[illegible] 10/30/68 [illegible] Ci Sr-90
[illegible] 5/[illegible]/70 [illegible] Ci Sr-90
9/9/70 400 mCi Zn-65

F. Facilities
[illegible] 0.1 mCi Sr-85 and Cs-137 in dosimetry gages.

Licensee: _____

G. Equipment

Inspector stated that all equipment was handled in a manner to prevent damage and that the survey instruments were present and were adequate for the inspection.

H. Radiological Safety Procedures

Inspector observed the licensee's radiological controls as listed in the Table of Contents of Part 20 regulations. It was noted that the applicable procedures for use of materials and facilities were kept at the Main Warehouse facility that was in effect by some time. It was noted that the RT-85 was supplied with portable and Environmental Survey Meters. Inspector observed the use of the gauge, RT-3 personnel dosimeters in the trailer badges.

Licensee: _____

I. Personnel Monitoring and Exposure to External Radiation

Q. [illegible] Sawyer [illegible] AEC-type personnel [illegible] by the [illegible] and [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

EX6

J. Exposure of Employees to Concentrations of Radioactive Materials

[illegible] the air-activity [illegible] limited to Zn-65 and P-32. The P-32 [illegible] were mainly [illegible] [illegible] were [illegible] and involved [illegible] than 100 mCi. [illegible]

K. Effluents to Unrestricted Areas

[illegible] the amount of [illegible] material in effluents to unrestricted areas [illegible] for the [illegible] stated in Table

Licensee: _____

L. Disposals

Geiger stated that radioactive waste was collected, stored and then transported to Nuclear Engineering Co., Oak Ridge, Tn. for disposal. Disposal was made in 1976. We recorded [illegible] and shipment.

M. Miscellaneous Surveys, Evaluations and Records

The only surveys which have performed are in the linear accelerator area. Jack does this routinely by taking instrument readings and wipes. The surveys were made monthly to quarterly. Geiger stated that the frequency of surveys and records depended upon the amount of work being done. He stated surveys were made [illegible] work was done in the room, however, results were negligible. Other

N. Special License Conditions

The license conditions were reviewed with Geiger and found to be complied with except for the proper maintenance of records as indicated in the graph above.

Geiger stated records required that the following [illegible] Nuclear Engineering Co., Oak Ridge, Tn. Geiger stated no tool was utilized [illegible]

Licensee:_____

O. Posting and Labeling

P. Independent Measurements

Q. Operations Observed

None.

Licensee: _____

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

None reported by licensee since last inspection

S. Other information or continuation from previous paragraphs.

M. Miscellaneous Unusual Situations and Recommendations

Licensee informed RO: 5/15/79, by memo, that each Radiation Safety Officer must successfully complete a written test to take possession, and that certificates of both Type A and Type B were available. Licensee was informed that the Commission would require that individuals who use or supervise the use of byproduct material pursuant to a general license must be instructed at least every 3 years. Licensee was also informed that changes in personnel must be reported to the Commission and that the licensee is responsible for the actions of employees.

VENDOR NO | P.O. NUMBER | P.O. DATE | REQ. NO | DELIVERY REQUIRED | TERMS | F.O.B. | SHIP VIA

Texas Water Conditioning
9301 Whitney Blvd. P.O. Box 2857
Alvin, Texas 77511

SHIP TO
Galveston County Health District
Alvin Branch Laboratory
Hwy 6 at
Old Galveston Rd.

SHIPPER | PKG PRICE AMT | PKG SHIP WEIGHT | PKG INSURANCE AMT
SHIPPING POINT | LESS "CHARGE" AMT. | PRT LIST NO | DATE PASSED
VIA | NET AMOUNT | TAX AMOUNT | CR TO ACCT
PRO NO | INVOICE AMOUNT | INVOICE LIST NO | DATE PASSED
C&R NO | ADJ | ADJ. TO ACCT NO | DR / CR
CAR SEALS | WORK ORDER | ACCOUNT NO | MAT'L VALUE | FREIGHT

ITEM NO	QUANTITY	UNIT MEAS	DESCRIPTION AND SPECIFICATIONS	PRICE	CODE	F/C	QUANTITY RECEIVED	PRE-PRICE AMOUNT
1	1							

#1

MISCELLANEOUS RECEIVING REPORT

MR - 9714

SHIPPER	PRE PRICE AMT.	PRICED BY	DELIVER TO
[illegible]			
SHIPPING POINT	LESS TRANS. AMT.	FRT. LIST NO.	DATE PASSED
[illegible]			
VIA	NET AMOUNT	TAX AMOUNT	CH'GD TO ACCT.
[illegible]			
PRO NO.	INVOICE AMOUNT	INVOICE LIST NO.	DATE PASSED
97-[illegible]			
CAR NO.	ADJ	ADJ. TO ACC'T NO.	DR. CR.
[illegible]			
CAR SEALS.			

WORK ORDER	ACCOUNT NO.	MAT'L. VALUE	FREIGHT

[illegible] NET 30 DAYS

Description		QUANTITY RECEIVED	PRE-PRICE AMOUNT
[illegible]		1	
[illegible]		1	

#2

[illegible] PAPER PAT'D BY NCR CO.

COMPANY NAME: ALCOA — WORKS:

VENDOR NO.	P.O. NUMBER	P.O. DATE	REQ'N NO	DELIV. REQUIRED	MTL. ONIG. REC. ON MRR	SHIP'G. PROMISED
		5-25-69				

MISCELLANEOUS SHIPPING ORDER

REQUESTED BY: [illegible]
DEPARTMENT: [illegible]

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

SAME

REASON FOR SHIPMENT		SHIPMENT CONSISTS OF		
		NO. OF CONTAINERS		WEIGHT
SOLD		BOXES		
NOT AS ORDERED		CARTONS	1	30
ORDERED IN ERROR		PIECES		
TO BE REPAIRED		DRUMS		
RETURN FOR CREDIT		CRATES		
TRADE-IN		SKIDS		
OTHER (SEE NOTE *)	*			

APPROVED BY:
LOCATION OF MATERIAL:
DATE SHIPPED: 5-29-69 (EARRING)
B/L NO.: 33760
CAR NO.:
INVOICE NO.: TO BILLING
DATE:
CREDIT ACCT.:
PRICED BY:
DATE:
FREIGHT AMT.:
FREIGHT LIST:
CHARGE FRT. TO: 1-2
TO BE RETURNED TO US: YES [ ] NO [ ]
SHIP VIA: AIR EXPRESS PREPAID
F.O.B.: DESTINATION
TERMS:
AUTH. NO.:
MRR DATE AND NUMBER:

ITEM NO.	QUANTITY	UNIT MEAS	DESCRIPTION AND SPECIFICATIONS	PRICE	CODE	B/O	QUANTITY SHIPPED	VALUE
	1		TEXAS NUCLEAR PORTABLE ANALYZER MODEL 466 $4500.00 "RADIOACTIVE MATERIAL" PU 238 - 30 M CI	N/C				
			*RENTAL INSTRUMENT - ON LOAN TO RAW MATERIALS DIVISION					

ENM

(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 6083
Phoenix, Arizona 85011
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	DESCRIPTION					ORDERED	SHIPPED	UNIT	AMOUNT
		RETURN OF CUSTOMER PROPERTY								
		(Portable Analyzer, S.N. 11 with Probe S.N. 4)					1	1		N/C
#5										

DATE SHIPPED	SHIPPED VIA		PPD.	COLL.	FACT.	DEST.	PAY THIS AMOUNT ▷ $
8-12-69	Air Express	87-76-86	X			X	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 NDER SECTION 14 THEREOF.

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

VENDOR NO.	P.O. NUMBER	P.O. DATE	REQ'N. NO.	
	NR 90714	12-2-69		

ED SENSOR

PURCHASING

NO BILLING

MISCELLANEOUS SHIPPING ORDER

SHIP TO:

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

SAME

REASON FOR SHIPMENT: X

SHIPMENT CONSISTS OF: 1 CRT. 50 LB

12 6 42 13 44

CARRIER: CAISOL FRTWY PP

TERMS: X

SHIP VIA	F.O.B.
BEST WAY PRE AID	DESTINATION

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

EK

#6

PRINTED BY THE STANDARD REGISTER COMPANY, U.S.A.

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	3. License number
1. Name: Aluminum Company of America	15-18
2. Address: Alco Research Laboratories, Freeport Road, New Lensington, Pennsylvania, P. O. Box 772	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: [illegible] X-RAY ANALYZER

Evaluation of the X-Ray Analyzer has been fraught with problems from the outset. Much of our original work was of little value when it was discovered that the instrument was displaying a significant negative drift. The instrument was shipped back to [illegible] Corporation for repair and adjustment, and was received by us on August [illegible]th. Unfortunately [illegible] had adjusted the instrument such that the original calibration curves drawn by [illegible] were invalid. An attempt to fit our 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 [illegible] 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] and preparing them with a [illegible]

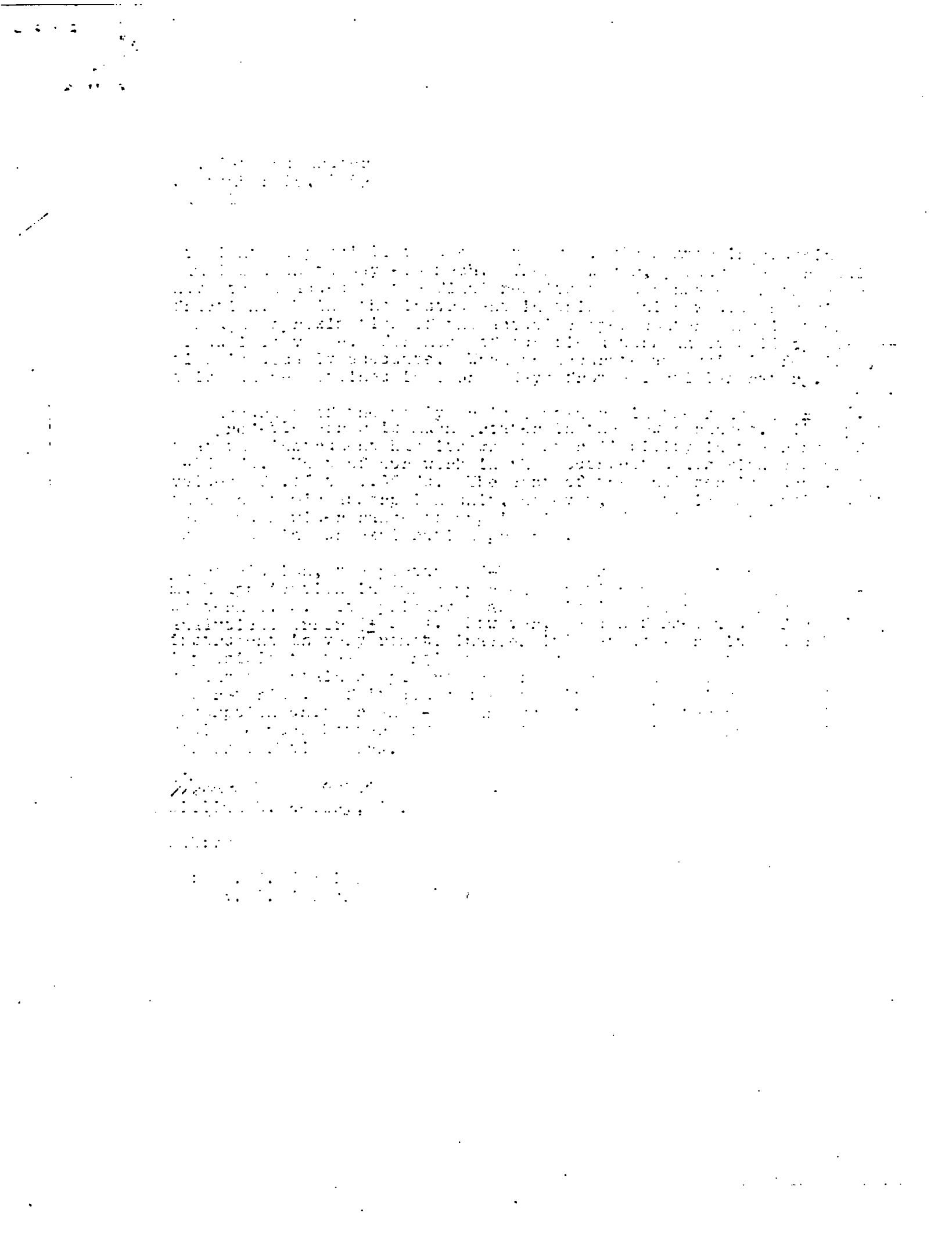
[illegible]

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

[illegible]

[illegible]

#8



#9

TEC - 37-07653-01

LICENSEE = A.R.L. + Arizona LICENSE NO. = AREC - 15-18

GAUGE LOCATION = Anal. Sem. 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 S/N =
(Radiochemical centre)

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 = Tracer Nuclear Corp. PO NO. = NR-90714

#10

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

GAUGE LOCATION = Gun obs. 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 - Fission (Ba)
X-ray fluorescence - Fission (Ba)

VENDOR = Texas Nuclear Corp PO NO. = M12-90714

MISCELLANEOUS RECEIVING REPORT

SHIPPER'S GROSS WEIGHT	OUR GROSS WEIGHT	RECEIVED	REC'D BY	DATE PREPARED	M.R.R. NO.
		12/7		5/5	72832

P.O. NUMBER	BUYER	P.O. DATE	REQ'N NO.	DEL'Y REQUIRED	SHIP PROMISED
[illegible]		5-21-70	S10008	6-5-70	6-5-70

TEXAS NUCLEAR CORPORATION
C/O RADIATION CO., INC.
1241 WASHINGTON ROAD
PITTSBURGH, PA. 15241

ALUMINUM COMPANY OF AMERICA
ALCOA FERRY PLANT
R.D. KEISTER TOWN, PA. 15068

SHIPPER	PRE-PRICE AMT.	PRICED BY	CHK'D
SHIPPING NO.	LESS TRANS. AMT.	FRT. LIST NO.	DATE PASSED
VIA	NET AMOUNT	TAX AMOUNT	CH'GD TO ACC'T
	17850		
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

SHIP VIA	F.O.B.	TERMS	AUTH. NO.
YOUR CONVENIENCE	OUR WKS., N.K., PA.	NET 30	K-S00109

ITEM NO.	QUANTITY	UNIT MEAS.	DESCRIPTION AND SPECIFICATIONS	PRICE	CODE	P/C	QUANTITY RECEIVED	PRE-PRICE AMOUNT
1	1		SERVICES OF A QUALIFIED AND SPECIFICALLY INSTRUCTED PERSON TO ASSIST IN THE INSTALLATION AND START UP OF A GAUGE MAINTENANCE WORK PERFORMED ON CO. ORDER P-50092.	$17.00 HR PLUS TRAVEL PLUS LIVING EXPENSES	181191	C	1	17850
			17,850.					
			BUYER'S VERBAL ORDER OF SUE M. MOELLER.					
			PLEASE SIGN DUPLICATE (2) AND RETURN WITH INVOICE.					
			ALL CORRESPONDENCE TO BE SENT TO ATTENTION, P.O. BOX 1, NEW KENSINGTON, PENNSYLVANIA, 15068.					
			THIS ORDER IS NOT SUBJECT TO THE RENEGOTIATION ACT OF 1951.					
			TIME NOTED SUBJECT TO ACCEPTANCE. ACCEPTANCE MUST BE STATED AND CONFIRMED TO T. R. W. ANDERSON BEFORE PROCEEDING WITH THE ABOVE WORK.					
			THIS PURCHASE ORDER IS ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS					
			WITNESS THE SEAL OF THIS DAY OF 19					

Sent
Unbilled
Sent
11

P.O. NUMBER	BUYER	DATE	REQ'N NO.	DEL'Y REQUIRED	SHIP PROVIDED
P-[illegible]-P80116-[illegible]		12-3-71	52 12	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
BTL P. O. BOX 545
NEW KENSINGTON, PA. 15068
FREIGHT LOGAN FERRY, PA.
1900508

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% Ni-Cd CELLUM 137 SOURCE TRANSFERRED PER P. O. NO. P0505716 DATED 8-6-69. LEAK TESTING SERVICE IS TO INCLUDE:		243467
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 KOB DIV.

- CONTINUED ON PAGE 2 -

P & P DIV. - DENSITOMETER SERVICE

#12

ALUMINUM COMPANY OF AMERICA
VICE PRESIDENT PURCHASES

R. W. STOMAY, 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

RCG:cek

08932