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# UNITED STATES ATOMIC ENERGY COMMISSION CHICAGO OPERATIONS OFFICE 9800 South Cass Avenue Argonne, Illinois 60439

TELEPHONE (312) 739-7711

### NOV 1 2 1974

Martin B. Biles, Director Division of Operational Safety, HQ

RADIOLOGICAL CONDITION SURVEYS OF REAL PROPERTY

Reference: Memorandum, Bauer to Biles, dated 9/3/74

Enclosed for your information and use is a copy of the September 25, 1974, letter, Neal (ANL) to Manager (CH), with attachments which contain material supplementing that provided you in the referenced memorandum regarding buildings in the City of Chicago which formerly housed ANL and/or the Metallurgical Laboratory. The enclosure contains final radiation surveys and/or related information regarding:

- 1. 39th Street Warehouse
- 2. East Pavilion Museum of Science and Industry
- 3. Ryerson Physical Laboratory
- 4. Drexel House (this has not been previously listed)
- 5. New Chem Annex
- 6. West Stands

This documentation substantiates our earlier statements that these facilities were decontaminated to normal background levels or to less than restoration levels as detected by the then available portable radiation detection instruments (not significantly different from modern ones) prior to termination of government control. Documentation of final survey results for a) Eckert Hall, b) Jones Lab, c) Ricketts Lab, d) Kent Chemistry Lab, e) the Small Animal Facility, and f) the National Guard Armory (all of which are still in existence) has not been located (see the last paragraph of page 2 of the enclosure for more information). However, personnel involved in these operations indicate that these facilities also were decontaminated to normal background levels or to less than restoration levels prior to their release. These individuals are W. Tyrrell, ANL, (who was involved in the

reclamation activities and was involved with all the above facilities), and J. Wing, OR, (who was a Health Physics Technician at the time of restoration activities and was involved with facilities a, b, and c above). It is possible to document testimony of several other persons who worked at the Metallurgical Laboratory, however, manpower for this effort is not available.

Based upon the available documentation, statements by personnel involved, and the possibility of contamination from other sources since termination of government control, we strongly recommend that no resurvey efforts regarding these facilities be initiated.

l. l. M. L. wain -Robert H. Bauer

SD: BJD

Enclosure: Letter, Neal to Manager, CH, dated 9/25/74, w/enclosures

The legence inguist, B. T. Davie - 11/15/74 All has determined the that be large on edy B, the said of monderine and the with it Congetonich, we have the alog were amelicare importance. 217.3 id now a provide provide the R 57-11/15/79

Barens To

### ARGONNE NATIONAL LABORATORY

September 25, 1974

Manager, Chicago Operations Office U. S. Atomic Energy Commission Argonne, Illinois 60439

Dear Sir:

DECOMMISSIONED AFC FACILITIES, CITY OF CHICAGO

References: 1. Letter, R. H. Bauer to R. G. Sachs, 8/15/74

2. Letter, H. V. Ross to Manager, CH, 11/15/73

3. Letter, D. M. Gardiner to R. G. Sachs, 11/6/73

4. Letter, H. V. Ross to C. C. McSwain, 9/2/71

A listing of buildings and/or facilities within the City of Chicago which had formerly housed Argonne National Laboratory and/or its predecessor, the Metallurgical Laboratory, was submitted as an attachment to reference 4 listed above. It was stated at that time and again in reference 2 that these facilities had been cleaned to normal background levels or to less than restoration levels as detected by the then available radiation detection instruments (0.2 mR/hr at 1" H&S beta-gauma and 500 d/m/100 cm² alpha). These statements were based upon the memory and recall of personnel involved in these operations (Mr. J. R. Novak and Mr. W. J. Tyrrell (ANL), Mr. J. H. Pingel (USAEC-CH-SD), and Mr. G. T. Lonergen (USAEC-RO, Glen Ellyn).

We have searched our records covering the early experiences of the Laboratory (ies) and are enclosing documents which reinforce the statements referred to above. A summary of those documents follows:

### 1. 39th Street Warehouse - Attachment 1

- A) Memorandum summarizing final surveys of this facility which was performed on 7/14/49. Attached to this memo is a survey map showing radiation levels before and after decontamination.
- B) Memorandum transmitting these results to the ANL Business Manager.

### 2. East Pavilion - Museum of Science and Industry - Attachment 2

- A) Memoranda requesting radiation survey.
- B) Memorandum itemizing final survey results of 7/12/49.
- C) Memorandum transmitting results to ANL Business Manager.

### 3. Ryerson Physical Lab - Attachment 3

- A) Memorandum detailing results of partial surveys of Ryerson prior to the return of some areas to the University of Chicago 7/19/49.
- B) Survey sheet detailing survey results of the remainder of Ryerson prior to return of these areas to the University of Chicago 1/19/52.
- c) Weekly report summarizing results of final surveys on Ryerson 3/21/52.

### 4. Drexel House - Attachment 4

- A) Memorandum from ANL Director, W. H. Zinn, to the University of Chicago formally returning Drexel House to the University 7/25/49.
- B) Memorandum requesting a survey 7/27/49.
- C) Memorandum detailing results of the radiation survey 8/4/49.
- D) Memorandum transmitting results to ANL Business Manager.
- E) Other memoranda asking for more detail.
- F) Memorandum from Director, Health Physics Division, clarifying final survey results 8/24/49.

### 5. New Chem Annex - Attachment 5

- A) Weekly report itemizing final status of the Annex except for roof period 3/17 to 3/23/52.
- B) Weekly report itemizing roof survey period 3/24 to 3/30/52.
- C) Weekly report summarizing surveys performed after demolition was completed period 8/11 to 8/17/52.

#### 6. West Stands and New Chem

A file exists with detailed survey sheets and weekly summaries concerning the radiation safety coverage of the Restoration Frogram in these two areas. This file covers the period 11/12/51 through 12/14/52 during which time the decontamination of these two areas was proceeding. Continuous coverage was supplied by the Health Physics Division. Attachment #6 - a weekly report for the period ending 12/14/52 - indicates that final cleaning of New Chem was near. The walls had been cleaned and that the floor decontamination had begun. A final report of the radiation surveys of these two areas has not been located.

Although many files documenting surveys performed at Site B are available, documentation of final survey results for Site B and the other facilities listed in references 2 and 4 have not been located. These records were a part of four (4) boxes of radiation safety records covering the early Metallurgical Laboratory history that were destroyed inadvertently in the late 1950's. The destruction occurred because of a mistake by a records center technician who removed four (4) boxes from the "C" aisle rather than the "D" aisle. However, attachment number 3(B) - an original

survey report date 1/14 to 1/19/54 - lists two surveys performed on items from Eckhart Hall. This indicates that surveys of other areas such as Eckhart, Kent, Jones, Ricketts, etc. might have been documented in the routine survey sheets for that period of time when the surveys were done. To uncover these surveys would be impossibly time consuming.

It is our opinion that the enclosed documentation amply reinforces the general statements that all restoration projects were covered by continuous Health Physics surveys and that the facilities listed in references 2 and 4 (and Drexel House) were decontaminated - where necessary - to levels below the minimum detectable levels of the radiation instruments available at that time.

It is suggested that should further documentation be desired that AEC and ANL personnel meet to discuss the direction and the amount of effort to be expended in such a search.

Very truly yours,

P. E. Neal

Associate Director

Attachments

In Duplicate

### 

July 19, 1949

J. H. Hokinley

Business Hamger

L. D. Marinalli

Health Physics

Complete Survey of 39th Street Warehouse for contamination

A thorough survey for contamination of the 39th Street Marshouse including soil surface, sheds and loading platforms in the rear yard, was completed July 7, 1949. On the accompanying map are indicated the locations and degree of contamination.

Also indicated in thousands (N) of alpha disintegrations per minute and in milliroentgens per hour at one inch soft (S) or hard (H) are the levels of contemination after decontemination by a Reclamation Service Crow. This indicates the present state of the building and grounds, which are below acceptable levels.

Instruments used were contable alpha counters, portable alpha floor counter, and pertable (M counters. Surveying was done by J. Mitchell, G. O. Payno, and J. M. Pingal.

Enc.

L. D. Barinelli Associate Difector Health Physics Division

Lilieno

co: J. E. Rose
Reading File

July 19, 1949

J. E. Rose and L. D. Marinelli

DEPARTMENT

G. O. Payne and J. H. Pingel

DEPARTMENT

Final Survey of 39th Street Warehouse SUBJECT

A survey for contamination of the 39th Street Warehouse including soil surface sheds and loading platforms in the rear yard was completed July 7, 1949. Contaminated areas found in the building, the yard, and on equipment remaining in the building, are indicated on the accompanying map. Contaminated articles found and removed from the building by Reclamation Service and portable counter readings of the contaminant are as follows:

Table Top, 2-15M; 3/1 5.

Four 10-gal. cans being used in the basement for ashes, 2-30M; 10/1 3. (One marked "Return to Site B")

One Trash Can, 10M; 1/1 S.

Piece of paper (from container of HF=U Solution) 18/1"S.

Instruments used were portable alpha counters, portable alpha floor counter, and portable GM counters. Surveying was done by J. Mitchell, G. O. Payne, and J. H. Pingel.

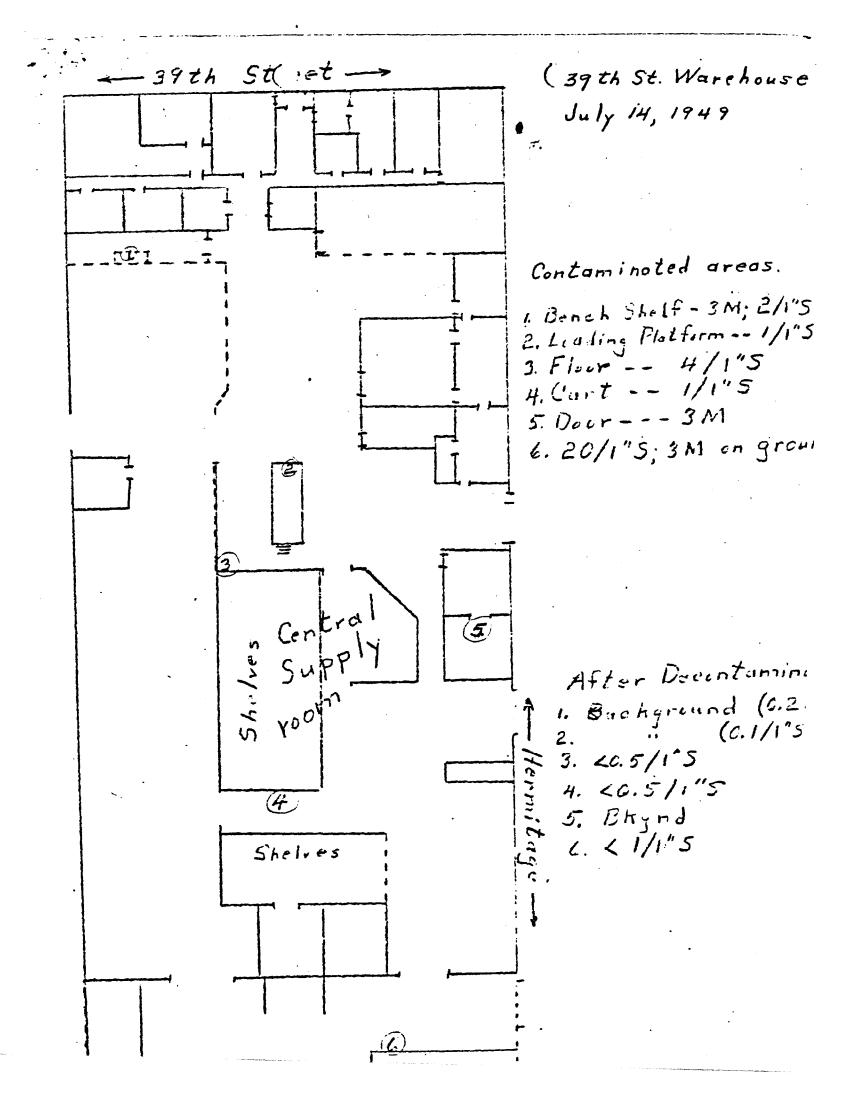
Realth Physics

GCP: emr

Enc.

cc: Reading File

J. H. Fingel Health Physics



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J. II. Moximier

Spainess liamager

L. D. Marinelli

Health Physics

Completed survey for contemination of the East Pavilion of the Dureum of Science and Industry Building

A thorough survey to determine the extent of contamination, if any, of all areas (excluding intohed areas) shown on the accompanying building plans are completed July 12, 1949. He contamination above the background levels of the instruments could be detected on any parts of the building or on equipment receiving in the building. Background levels of the instruments sens less than 200 disymin for parts he alpha counters and less than 0.5 mm/m for portable betweeness counters.

Instruments used more portable sloke counters, portable alpha flow counter, and Precision portable GM counters. Surveying was done by G. C. Payne, E. Schlant, T. J. Friedmin, and J. H. Pingel.

Zno.

L. D. Harinelli Associate Director Health Physics Division

LDH:

co: J. E. Rose E. D. Payne Basding File

DATE

July 19, 1949

To J. E. Rose and L. D. Marinelli

DEPARTMENT

Health Physics

FROM

G. O. Payne and J. H. Pingel

DEPARTMENT

Supercr Final Survey of the East Pavilion of the Museum of Science & Industry

A final survey of the East Pavilion of the Museum of Science and Industry for radioactive contamination was completed July 12, 1949. No contamination above background levels of the instruments could be detected on any parts of the building or equipment remaining in the building. Background levels of the instruments were less than 200 dis/min for portable alpha counters and less than 0.5m/hr for portable beta-gamma counters.

Two contaminated articles found and removed from the building were:

- 1. The masonite bottom of a box which had alpha and beta contamination to the extent of 2-124 dis/min and 1/1 s;
- 2. A large burlap bag with beta or gamma contaminant giving readings as high as 2/1 s.

Instruments used were portable alpha counters, portable alpha floor counter and Precision portable CM counters. Surveying was done by G. O. Payne, E. B. Schlant, Wm. J. Friedman, and J. H. Pingel.

George O. Payne Health Physics

GOP: emr

cc: Reading File

John H. Pingel Health Physics

### Argonne National Laboratory

P.O. BOX 5207 CHICAGO BO, ILLINOIS BUTTERFIELD 8-5200

June 29, 1949

To: J. E. Rose

Director - Health Physics

From: J. H. McKinley

Business Manager

There is enclosed copy of letter, dated June 24, 1949, from J. E. Armstrong, Director, Division of Engineering, OCDO, USAEC, Subject: East Wing of the Museum of Science and Industry.

Would you be good enough to take the necessary action on paragraph numbered (3) of Mr. Armstrong's letter, forwarding the information to this office for transmittal to Mr. Armstrong.

Infinly

JHM nc

6/30

Serge has already made aroungements for husework to be done UNITED STATES

ATOMIC ENERGY COMMISSION

Office of Chicago Directed Operations
P. O. Box 6140A

Chicago 80, Illinois

EC: PCL

June 24, 1949

Argonne National Laboratory P. O. Box 5207 Chicago, Illinois

Attention: J. H. McKinley, Business Manager

SUBJECT: EAST WING OF THE MUSEUM OF SCIENCE AND INDUSTRY

### Gentlemen:

Arrangements have been made with representatives of the Museum of Science and Industry to formally turn over to them on June 30, 1949 the east wing of this building, which has been occupied by the Argonne National Laboratory.

Therefore, it is requested that the following items be complied with as expeditiously as possible:

- (1) All keys are to be turned over to P. C. Moen, Chief, Construction and Maintenance Branch, AEC, by June 30, 1949.
- (2) The ANL shall continue to maintain a guard force until the building has been accepted by the Museum.
- (3) A complete survey shall be made to determine the extent of contamination, if any, and a complete report of this survey shall be furnished this office.

Yours very truly,

s/J. E. Armstrong, Director Division of Engineering

cc: C.A.Tregillus R.A.Hessler E.Payne J.T.Yore

DATE July 19, 1949

To J. E. Rose & L. D. Marinelli

DEPARTMENT

FROM G. O. Payne and J. H. Pingel

DEPARTMENT

Subject Further information on contamination of Ryerson

It is understood that Rooms 57, 58, and 63 in the besement and Rooms 152, 153, and 156 on the first floor of Ryerson are not to be returned to the University of Chicago. All other rooms, halls, etc. in the parts of Ryerson being returned to the University of Chicago have been surveyed and contamination found has been reduced to acceptable levels. Locations of contaminated areas found in rooms not previously surveyed, the degree of contamination, and levels to which contamination has been reduced are indicated on the accompanying maps.

Not indicated on the maps are the following four contaminated articles which Reclamation Service removed from the building:

1. One 10-qt galvanized pail 30M; 1/1 "S

2. Board and associated steel pipe 2/1"S

3. Small stone slab

30M 1100M; 3/1°S

4. Small stone slab

Instruments used were portable alpha counters, portable floor counter, and portable beta-gamma counters. Surveying was done by Herbert G. Bodie, Evelyn L. Hall. G. O. Fayne, and J. H. Pingel.

George O. Payne /

Health Physics,

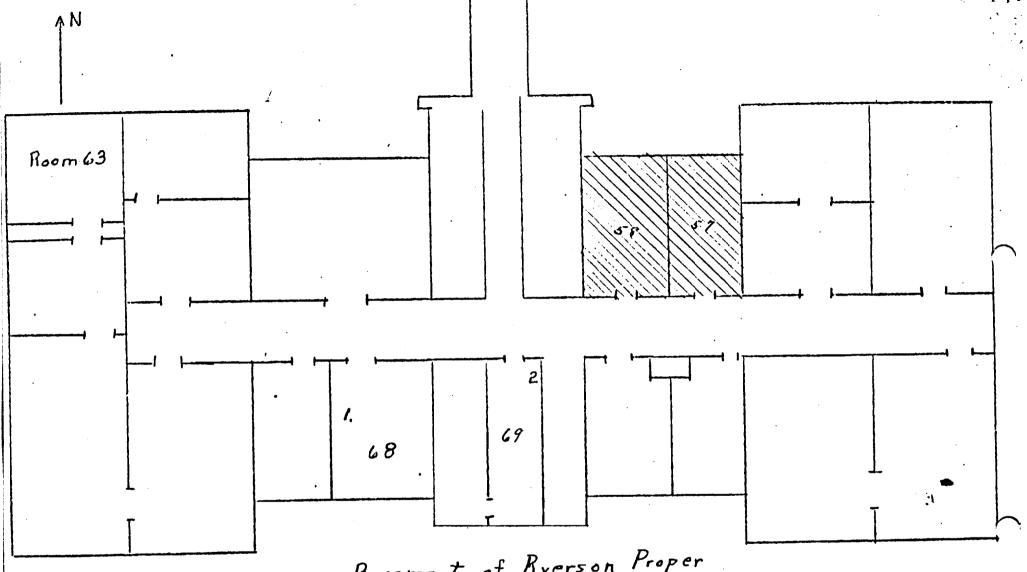
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cc: Reading File

John H. Pingel

Health Physics



Basement of Ryerson Proper Hatched areas remain Argonne Nat'l Lab.

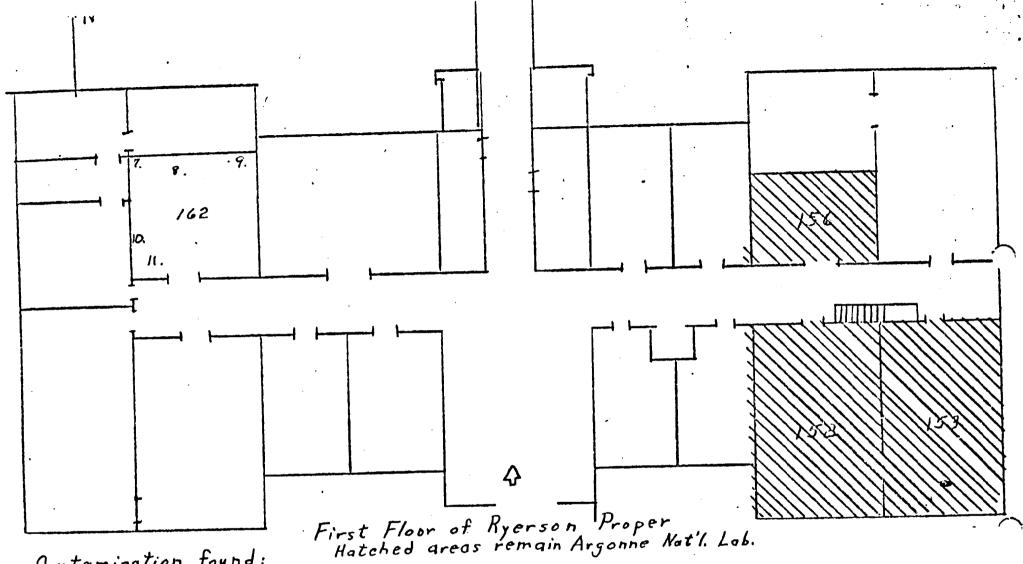
Contamination found:

- 1. 2 areas on stone slab --- 2-6M
- 2. Area on floor and wall -- 2 10 M

(Note) Room N-81 Annex (not shown) is het contaminated.

After decentamination:

1. < IM (bkgnd)



Contamination found:

7. Area on stone lab. benah -- 2-40 M

- Floor --- 2-6M

- stone lab. bench -- 2 M.

wall smitchbox --- 2/1"5 floor - --- 2-17M

After decontamination:

7. < 2 M 8. Bkgnd. (<0.5M)

1 < 0.5/1"5)

DATE April 15, 1952

J. E. Rose

Radiological Physics - D-203

DEPARTMENT Radiological Physics - City M. F. Huntsinger - J. F. Wing -

K. L. Nishio

Summary of Activities at New Chemistry and West Stands for the Week of March 17, through March 23, 1952.

### SURVEIS:

All surveys made during this period were in connection with the Restoration Program.

A survey completed on March 21, 1952, shows all rooms occupied by the Argonnes National Laboratory in Ryerson on the University of Chicago Campus to be free of any detectable (less than 0.2/1"S and less than 0.511) radioactive contanination.

The final survey of the New Chemistry Annex has been completed with the exception of an alpha survey of the Annex roof which has been postponed due to weather conditions. The portions of the Annex floor which were painted red due to residual contamination have been removed. All laboratory drains have been plugged with cement and will be removed by Reclamation Service when the cement foundation slab is taken up by the sub-contractor. These drains will be indicated on a floor plan which will be included in the final report on the restoration of the New Chemistry Annex.

### AIR SAMPLES:

No air samples were recorded during this period which showed long-lived activity above 10% of the maximum permissible level after 72 hours decay.

### SPECIAL SURVEY REPORT

-17-52 .

.13-52

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spoyald, R. D.

19-52: West

SHIO

19-52

34IO -

HIO

STIO

-17-52 West

-17-52 West

-17-52 West

RP - Req. by 7. J. Tyrrell (RS)

Request: Signed And-6 for 60 lead bricks (2"xd;"x6") which were checked.

Request: Signed And-6 for 60 lead bricks (2"xd;"x6") which were checked.

Request: Signed And-6 for 60 lead bricks (2"xd;"x6") which were checked.

Room 5 - Reg. by A. L. Singleton (25)
Request: Check 3 disassembled olowers for any activity before decontaminat
Results: No activity was detected on 3 disassembled blowers...

New Chemistry, Room 2 - Req. by J. 7. Fing (RP)

Request: Check several highly contaminated items which were kapt in a hood Room Z before they were taken to Room 6 for decontamination... R.

MacDonald (RS) and L. J. Rimkus (RS) took partition transferring several highly contaminated items. They were assault masks, show covers and gloves. An air sample was taken which showed 6% of the

after 18 hours decay.

Results The items and activity were as follows:

2 trays containing several small metal plates, 360 to 4500M:

Several stainless steel containers, 240 to 1200M:

Several beakers, 3 to 254

Several chemical bottles, 1 to 25%

Room 5 - Req. by A. L. Singleton (RS)

Request: Check 2 disassembled blowers for any activity before decontaminates the activity was detected on 2 disassembled blowers...

Room 5 - Req. by A. L. Singleton (RS)

Requests Check & disassembled blowers for any activity before decontaminate Results: No activity detected on the & blowers.

RP - Rec. by W. J. Tyrrell (35)
Request: Signed ANL-6 for 200 lead bricks (2"x4"x8") which were checked for any activity before they were sent to D205.

New Chem

Room 6 - Req. by H. J. Tyrrell (RS)

Request: Check 3 sheets of platinum approximately 3"x2" for any activity

after decontamination. Results: 2 sheets - no contamination detected. 1 sheet - 0.25 to 1.5/18. These were wrapped and given to G. F. Steel (CH). Miss Steel was. notified as to contamination present. المستراع أراء والمور 

-20-52 \_;<u>\_</u>;\_\_: Room 14 - Req. by P. L. Borick (PS)

Request: Check one platform lacder for any activity prior to shipment to Si 与中国的B·ANNA (5月) 製造品

Results: No contamination detected. THE CONTRACT WAS TOURNESS OF THE

Room IL - Rec. by P. L. Borick (BS) Requestre Check one large exhaust fam from D-Attic for any activity

Results: No contamination detected

21-52 **YG-** -----

2000年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年,1900年 Room LI' - Reg. by J. F. Wing (RP).

Request: Check miscellaneous items in Room 41 prior to disposal.

Results : Miscellaneous glassware and trays, 2 to 30M; platinum crucible in. hood, 10/3"E, 400/3"S, much, much greater than 24,000%. The above items are to cendisposed of as DAW. The crucible will be covered with paraffin wax and placed in a screw cap bottle for disposal.

Annex - Reg. by 7. J. Tyrrell (RS)

Request: Check saw used to cut away painted portions of cement floor in Nev Chemistry Annex.

Results: No contamination detected

Ryerson, Rooms 153-156 - Req. by W. J. Tyrrell (RS)

Request: Check floor of Room 156 and the sink in the NW corner of Room 153 any activity after decontamination.

Results: No contamination detected on the floor or the sink.

#### ATR COUNTS

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3-18-52	ነ ም	2.	Removing hood contents		Tall - and the soft of the printing
3-10-22	11-00			from - 6	17 hours
3-18-52	N C	6	Decontaminating items		
3-10-52	7-0		Room 2 in hood in Room		
			[[] A. L.		
				<b>对于"自己"的"自己"的"自己"的"自己"的"自己"的"自己"的"自己"的"自己"的</b>	
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2°-3-10-52	3.3-1	Corridor			25 hours
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<sup>#</sup> g of MPL based on MPL for Pu (70 d/m/M).

NEW CHARLEM Rooms C-I, 2, 3, 9, 10 - Reg. by W. J. Tyrrell (ES) Request: Check scraped areas in Rooms C-1, 2, 3, 9, and 10 prior to disposal for the benches and shelving. Results: No contamination detected. Registration of the Control of the C Rooms C-4, 7, 8 - Req. by W. J. Tyrrell (RS) Request: Check scraped surfaces in Rooms C-4, 7, and 8 prior to disposal of W : benches and shelving. Results: No contamination detected. STATE OF THE PROPERTY OF THE P Room B-2 - Pag. by H. J. Tyrrell (RS) 15-52:. Request: Check cave in Room B-2 after all lead brick has been removed. **3G** - : . Results: No-contamination detected. Eckharu, Room 118 - Rec. by W. J. Tyrrell (PS) 17-52 Requesta: Check rug on floor of room llo following attempts to decontaminate II. Results: Of the original six spots only three were still active, 0.3/185. Bug was taken to West Stands for further decontamination. <u>ইয়াই মুখ্য লোক ক্রিটিক লোক বিশ্বিক টি</u> Eckhart, Room 117 - Reg. by W. J. Tymell (RS) 7-52 Requests Check bench in Room 117 following decontamination. Results: No contamination detected. Aw Christian - Req. by #. J. Tyrrell (RS) Request: Check all hoods in C Corridor (18) prior to dismantling same. Results: No contamination detected. and the state of the state of Rooms C5A: C5, C6 - Req. by T. J. Tyrrell (RS) Request: Check scraped areas in Rooms C-5, C-5A, C-6 prior to disposal of 8-52 benches and shelving. Results: No contamination detected. Rooms C-1, 2, 3, 10 - Reg. by W. J. Tyrrell (RS) Request: Cneck broken parts from hoods in Rooms C-1, 2, 3, and 10 after removal. Results: No contamination detected. ... Room B-2 - Reg. by W. J. Tyrrell (35) 3-52 Request: The following lead brick which was removed from B2 was checked. Results: No contamination detected. 286 lead brick, 9-21 slabs, 1 corner section, 1-2"xh"x16' lead sill. Ryerson - Rec. by J. R. Novak (RP) 7-52 Request: Check the following rooms at Ryerson prior to return to the Univer CIF sity of Chicago. Rooms 57, 58, 61, 62, 63, 151, 152, 153, 156. Room 57 - No contamination detected on equipment or room (except 7. Results: floor-too much equipment in the way to check it). Room 58 - No contamination detected on equipment or room (except

floor -- too much equipment in the way to check it).

Room 61 - No contamination detected. Room 62 - No contamination detected.

Room 63 - No contamination detected.

Room 151 - No contamination detected.

Room 152 - No contamination detected.

Room 153 - Two spots on floor in Na corner, 0.5 to 1% Sink and drainboard in NW corner, 0.5 to 21 Spot on table in Na corner, 11 Spot or lighting apparatus on bench on S side of room, IN CONTRACTOR OF THE STATE OF T

Room 156 - Spot on floor of dark room, 10M

Angust 24, 1,49

J. H. McKinley

Business Manager

J. E. Rose

Health Physics

Homo from H. B. Matthese concerning contemination of Drewel House

Wr. Matthews misinterprets the content of my report on existing contamination in Dremol House.

The report effectively says that contemination is mil; that it is below our instrumental background sensitivities, which in turn are for more sensitive than are required for the protection of personnel.

The history of the projects use of Dremel House shows that the only contemination was a small amount of natural brandum. This was thereuphly cleaned up prior to the installation of some very low background counting equipment which performed very satisfactorily for a long period.

I have no hesitation in stating that the building is quite fit, as to contamination, for the most sensitive instrumentation.

I am at a loss to find words or means for a more formeful statements

J. E. Rose Director, Health Physics Division

JER: em

cos J. H. McKinley Reading Pile

### Argonne National Laboratory

P.O. BOX 5207 CHICAGO 80, ILLINOIS BUTTERFIELD 1400

August 23, 1949

To: J. E. Rose

Director, Health Physics

From: J. H. McKinley

Business Manager

There is enclosed copy of memorandum, dated August 18, 1949, from H. B. Matthews concerning contamination of Drexel House.

Would you be good enough to furnish the report requested by Mr. Matthews for transmittal to him.

**8** 

JHI mc enc

### THE UNIVERSITY OF CHICAGO

August 18, 1949

To: Mr. J. H. McKirley

Business Manager, Argonne National Laboratory

From: H. B. Matthews

Associate Business Manager

Thank you for your memorandum of August 9 concerning contamination of Draxel House.

I believe we should have a more detailed report of the existing levels and locations of contamination in order that, if necessary, precautions may be taken to safeguard University and other personnel. Will you please supply this?

s/ H. B. Matthews

J. H. McKinley

Business Lanager

J. E. Rose

Health Physics

Completed survey of Drewel House for contemination

A survey of Drawel House for contamination was completed on August 3, 1949. No contamination above the normal background was detectable.

J. E. Rose Director, Realth Physics Division

em

co: Reading File

DATE August 4, 1949

То

J. E. Rose

DEPARTMENT

FROM

J. H.Pingel

DEPARTMENT

Subject Survey of Drexel House for Contamination

A survey for contamination in Drexel House was completed August 3, 1949.

No contamination above the background of the instrument could be detected.

Instruments used were a Precision portable beta-gamma survey meter and a portable alpha survey meter. Surveying was done by B. Suleski and J. Pingel.

John H. Pingel

Health Physics Division

JHP:emr

cc: Reading File

### Argonne National Laboratory

P.O. BOX 5207 CHICAGO BO, ILLINOIS BUTTERFIELD 8-3200

July 27, 1949

To: J. E. Rose

Director, Health Physics

From: J. H. Lickinley

Business Manager

Subject: Evacuation of Drexel House

There is enclosed for your information copy of memorandum, dated July 25, 1949, from W. H. Zinn to H. B. Latthews, subject as above.

Would you be good enough to make the necessary survey and furnish a report to this office.

Jundenly

Jili mc enc cc C.A.Tregillus w/enc

## ARCOME NATIONAL LABORATORY July 25, 1949

To: H. B. Lietthems

Associate Business Manager The University of Chicago

From: W. H. Zinn

Laboratory Director

W. H.O

Subject: Evacuation of Drewel House

Please accept this memorandum as formal release of Drexel House, effective as of July 1, 1949.

We wish to express to The University of Chicago the appreciation of Argome National Laboratory for the use of this facility.

WHZ nc
cc J.H.McKinley
J.E.Rose
C.A.Tregillus

DATE April 15, 1952

J. E. Rose

DEPARTMENT Radiological Physics - D-203

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H. F. Huntsinger -. J. F. Fins - Department Radiological Physics - City

K. L. Nishio

Summary of Activities at New Chemistry and West Stands for the Work of March 17, through Harch 23, 1952.

### SURVEYS:

All surveys made during this period were in connection with the Restoration Program.

A survey completed on March 21, 1952, shows all rooms occupied by the Argonne National Laboratory in Ryerson on the University of Chicago Campus to be free of any detectable (less than 0.2/1"S and less than 0.5M) radioactive containation.

The final survey of the New Chemistry Annex has been completed with the exception of an alpha survey of the Annex roof which has been postnoned due to weather conditions. The portions of the Annex floor which were painted red due to residual contamination have been removed. All laboratory drains have been plugged with cement and will be removed by Reclamation Service when the cement foundation slab is taken up by the sub-contractor. These drains will be indicated on a floor plan which will be included in the final report on the restoration of the New Chemistry Annex.

### AIR SAMPLES:

No air samples were recorded during this period which showed long-lived activity above 10% of the maximum permissible level after 72 hours decay.

### SPECIAL SURVEY REPORT

1-17-52 West
ISHIO Stands

RP - Req. by M. J. Tyrrell (RS)
Request: Signed AnL-6 for 60 lead bricks (2"xh"x6") which were checked
for any activity before they were sent to D-205.

-17-52 ISHIO Room 5 - Req. by A. L. Singleton (PS)
Request: Check 3 disassembled blowers for any activity before decontamination
Results: No activity was detected on 3 disassembled blowers.

-13-52 ISHIO / 26DONALD, R. D. New Chemistry, Room 2 - Req. by J. F. Ming (RP)

Request: Check several nightly contaminated items which were kept in a hood i

Room 2 before they were taken to Room 6 for decontamination. R. D.

MacDonald (RS) and L. W. Rimkus (RS) took part in transferring

several highly contaminated items. They were assault masks, shoe
covers and gloves. An air sample was taken which showed 6% of MPL

after 118 hours decay.

Results: The items and activity were as follows:
2 trays containing several small metal plates, 360 to 4500M
Several stainless steel containers, 240 to 1200M
Several beakers, 3 to 25M
Several chemical bottles, 1 to 25M.

-19-52 West ISHIO Stands

Room 5 - Req. by A. L. Singleton (RS)
Request: Check 2 disassembled blowers for any activity before decontaminate
Results: No activity was detected on 2 disassembled blowers.

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Room 5 - Req. by A. L. Singleton (RS)
Request: Check 4 disassembled blowers for any activity before decontaminati
Results: No activity detected on the 4 blowers.

-19-52 ISHIO RP - Req. by W. J. Tyrrell (PS)
Request: Signed ANL-6 for 200 lead bricks (2"::4"x8") which were checked for any activity before they were sent to D205.

Hers Chem

Room 6 - Req. by A. J. Tyrrell (RS)

Request: .. Check 3 sheets of platinum approximately 3"x2" for any activity after decontamination.

Results: 2 sheets - no contamination detected. I sheet -0.25 to 1.5/ These were wrapped and given to G. F. Steel (CH) ... Miss Steel. notified as to contamination present.

3-20-52 ਜ**਼**ਾ.

医线线 化氯化二磺胺酚 Room 14 - Req. by P. L. Borick (ES)

Request: Check one platform ladder for any activity prior to shipment. 

Results: No contamination detected **一种企业的企业的企业的企业的企业** 

3-20-52:

Room Ili - Red. by P. L. Borick (BS)

Request: Check one large exhaust fan from D-Attic for any activity Results: No contamination detected

3-2**I-**52t all the street

Room Al - Rec. by J. F. Wing (RP) Request: Check miscellaneous items in Room bl prior to disposal

Results: Miscellaneous glassware and trays, 2 to 30M; platinum crucibl , hood, 10/3"H, 400/3"S, much, much greater than 24,000%. The items are to decidisposed of as DAW. The crucible will be cov with paraffin wax and placed in a screw cap bottle for dispos

3-21-52 a ING a 's

**法,这是国际企业的** Annex - Req. by W. J. Tyrrell (RS)

Requests. Check say used to cut away painted portions of cement floor the Chemistry Annex.

Results: No contamination detected.

3-21-52 VINE :

Ryerson, Rooms 153-156 - Req. by W. J. Tyrrell (RS)

Request: Check floor of Room 150 and the sink in the NW corner of Room any activity after - decontamination.

Results: No contamination detected on the floor or the sink.

#### ATR COUNTS

Date	Bldg.	Room	Reason	Z MPL D	ecay Time
3-18-52	N.C.	2	Removing hood contents.	6 - 1	8 hours
3 <b>-</b> 18 <b>-</b> 52	N.C.	6	Decontaminating items from Room 2 in hood in Room 6.	- 6 - 1	7 hours
•					
3-18-52	ਡ.S.	5	Background.	117 1	lo minutes hours
					25 hours 72 hours
3-18-52	<b>₹.5.</b>	9	Background.	28	ll minutes 4 hours 24 hours
3 <b>-</b> 18 <b>-</b> 52	ਜ਼.S.	East Corridor	Background.	20	12 minutes 4 hours 25 hours

<sup>\* %</sup> of MPL based on MPL for Pu (70 d/m/113).

DATE April 10, 1952

J. E. Rose

DEFARTMENT Radiological Physics - D-203

M. F. Huntsinger - J. F. Wing

DEPARTMENT Radiological Physics - City

Summary of Activities at New Chemistry and West Stands for the Weck of March 24, through March 30, 1952.

The final Radiological Survey of the New Chemistry Annex has been completed and the final report submitted. An alpha survey of the roof which was postponed due to weather conditions, has been completed and shows readings of less than 1 M detectable.

### AIR SAMPLES:

No air samples were taken during the week at New Chemistry as none were required by the work being done.

No air samples were taken at West Stands during this week which showed long lived activity above 10% of the maximum permissible level after 25 hours decay.

### SPECIAL SURVEY REPORT - NEW CHEMISTRY

Annex Roof - Req. by W. J. Tyrrell (RS)

3-25-52

Check roof of annex for any alpha activity. Request: HUNTSINGER Less than 1 M detected on roof of annex. Results: WING Room 18 - Red. by E, E, Grage (BSV) 3-26-52 Check mirror from Room 18 for any activity prior to Request: : MING shipment to Site B. No contamination detected. Results: Room 14 - Req. by R. M. Jezik (RS) 3-26-52 Check small scratch on left, middle finger of R. M. Jezik (KS) Request: WING which occurred when Mr. Jezik, wearing gloves, struck his hand against a board in Room 2. No contamination detected on scratch, glove, or board. Results: Mr. Jezik covered the scratch with merthiclate and a band-aid from the first aid cabinet at the New Chem Guard Deak, Room 2 - Red, by W. J. Tyrrell (PS) **3-28-52** ° Check 10 Stainless steel trays in Room 2 for any activity. Request: WING : All trays were contaminated. Results: Average: 1-35 M Highest: 1-1200 M The trays were wrapped and taken to West Stands for clasning.

### SPECIAL SURVEY REPORT - WEST STANDS

Room 5 - Req. by A. L. Singleton (RS) 3-24-52 Check two blowers for any activity before decontamination. Request: NISHIO No activity detected. Results: Room 5 - Req. by A. L. Singleton (RS) 3-24-52 Request: Check two blowers for any activity before decontamination NISHIO 0.5/1" S was detected on one blower, and 5/1" S and 8 M were detected on the other blower. Room 5 - Reg. by A. L. Singleton (RS) 3-25-52 Check three blowers for any activity before decontamination Request: NISHIO No activity detected. Results: Room 5 - Reg. by W. R. Turner (RS) 3-25-52 Check one blower for beta and gamma activity only after. Request: NISHIO decontamination. 0.1-0.3/1" S was detected on blower. Results: Room 5 - Req. by E. H. Dansby (RS) 3-26-52 Check a vacuum cleaner for any activity before decontemination. Request: NISHIO 0.4/1" S was detected on top Resulta: 100/3" S " on inside on filter 40/3" S " The vacuum cleaner was decontaminated with scap and versene and it was painted after the activity was brought down to 4/1" S. It was placed to be used in New Chem. New Chem - Rooms 1, 2, & 11 - Req. by J. F. Wing (RP) 3-27-52 Spot check the floors and hoods in Rocms 1, 2, & 11 for any Request: NISHIO activity. Results: Floor: Room 1 - 4 M spot Room 2 - 4-90 M all over Room 11 - 0.5-10/1 S and 1-30 M all over. Hood: Most of hoods were contaminated with 1-5 M and one hood was contaminated with 25 M. Room 5 - Req. by W. R. Turner (RS) 3-28-52 Check 11 DAW cans (11 inner and 11 cuter) for any activity Request: NISHIO after decontamination with HNO2 and water.

further decontamination.

Results:

12 M was detected on one DAW can. It was put aside for

No activity was detected on the other DAW cans.

#### AIR COUNTS

Date	Bldg.	Room	Reason	*% MPL	Decay Time
3-25-52	W.S.	5	Background	2.8 X MPL 18% 5%	2 min. - 4 hrs. 23 hrs.
3-25-52	w.s.	9	Background	2.5 I MPL 17% 6%	11 min. 5 hrs. 24 hrs.
3-25-52	v.s.	East Corridor	Background	1.7 X MPL 11% 15	12 min. 5 hrs. 25 brs.

<sup>\*%</sup> of MPL based on MPL for Pu (70 d/m/M3)

DATE August 25, .1952

J. E. Rose

To

DEPARTMENT

Radiological Physics

J. F. Wing - M. F. Huntsinger

DEPARTMENT

Radiological Physics

Summary of Activities at New Chemistry and West Stands During the Week of August 11 through August 17, 1952.

#### NEW CHEMISTRY ANNEX:

The demolition of the New Chemistry Annex, removal of all laboratory and domestic drain pipe and back-filling of drain pipe trenches and grading the surface was completed on 8-13-52. A survey of this area for beta-gamma activity showed none detectable.

### WEST STANDS:

No surveys were made at West Stands during this period, as all Reclamation Personnel assigned to the Restoration Program were engaged in special work at D-203.

#### AIR SAMPLES:

No air samples were taken at New Chemistry or West Stands during this period as none were required by the work being done.

#### REMOVAL OF GUARDS:

The routine of a guard being on 24-hour duty at New Chemistry and West Stands was discontinued at 17:00 on 8-15-52. These areas were locked and keys issued to 0. P. Petersen (FD), 1 set; Reclamation, 3 sets, J. G. Feldes and W. J. Tyrell (RS); L. Mandelstein (RP) 1 set; J. F. Wing (RP) 1 set.

Tours of the two buildings are made before 08:30 and after 17:00 each day by a guard from Site B twice during each of the two shifts. During normal working hours, 03:30 to 17:00, the sergeant from Site B makes two tours of the two buildings, once in the morning, and again in the afternoon.

mr

DATE December 22, 1952

To J. E. Rose

DEPARTMENT Radiological Physics

From J. F. Wing - M. F. Huntsinger

DEPARTMENT Radiological Physics

Summary of Activities at New Chemistry and West Stands during the Week of December 8, through December 14, 1952.

### Fire Inspection

Routine fire inspections were made twice each weekday in both New Chemistry and West Stands.

### Progress

all of the walls in the rooms at New Chemistry have been decontaminated except rooms 2 and hl. At the present time contaminated transite and asbestos ductwork is being stored in these rooms and as soon as space in D-317 is available for this material it will be disposed of and the walls decontaminated.

Work has begun towards decontaminating the floors in New Chemistry.

### Surveys

All surveys made during this period were in connection with the Restoration Program.

### Air Samples

No air samples were taken during this period at New Chemistry or West Stands as none were required by the work being done.

Location	Requestor	Surveyor-	Request	Results
<del></del>	<del> </del>		the second of th	
	E.E.Brage	Wing	Check blower motor above Rm. 11	No contamination detected or
12-52 tic -	(ESV)		for any activity prior to	exposed working surface.
ltered	, , ,	•	repairs.	
r Section	1	•		
		777	Check cut on palm of right hand	No contemination detected or
12-52	B.A.Anderson	wing	of B. A. Anderson (ESV) and	cut or on screw. Mr. Anders
m. 49	(BSV)		check flat head machine screw	was given first aid at New
			on which he cut it.	Chemistry and then taken to
				Billings Hospital for furth
				treatment.
		•••	Check hands of J. J. Clark (ESV)	No contamination detected of
13-52	J.J. Clark	Wing	and belts he replaced on a new	hands or on belts.
m. 20-A	(BSV)	a Ayas <b>∦</b> aa aa	motor serving blower unit above	
•••			Rn. 11.	
				No beta-gemma activity dete
15-52	J.F. Wing	Wing	Check earth where New Chemistry	above background.
Annex	(RP)		Annex stood for any beta-germa activity after pipe trenches	above background.
			were back-filled and graded.	
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			A Secretary of the second	
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# C SPECIAL SURVEY REPORT (

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Location	Requestor	Surveyor	Request	Results
West Stan	ds .			
12-9-52				
Lunch Rm.	J.F. Hing (RP)	J. Fing	Check lunch room at West Stands for any activity.	No contamination detected.
12 12 E2	(RP)			
12-12-52	* "	J. Wing	Check I medium size lead pot in	200
Rm. 5	a.R. white (RS)	Je-ning.	room 5 for any activity after mi	1-2M general areas on the bottom of the pot (outside
•	<b>j</b> ***		decontamination attempt.	No contamination detected the poterial inside of
			The state of the s	Decontamination will be re
New Chemi:	tay .			
12-8-52				
wisc.Pms.	F.R. White	J. Fing	Chack spots on walls (approx. 9	Rm. 13, 2 spots 1-34.
** · ·	(RS)		sq.ft) in rooms after additional decontamination attempts.	Rm. 30, No contamination d
				Rm. 35, 1 spot 1-10M.
				Rm. 37, No contamination à These wall were surveyed n
				times during the day as the contamination progressed
•				rooms on that day.
2-9-52				
ics.Pms.	7.P. Thite (RS)		Check spots on walls (approx. 9 sq. ft) in rocms after additional	Rm. 13, 1 spot 1-24. Rm. 27, 1 spot 1-34.
•	(1007)		decontamination attempts.	Rm. 35, 1 spot 1-5M.  Rm. 36, No contamination d
		.: ~ .		ed. Note: These walls we: surveyd many times during
:				day as the decontamination gressed. This is the final
				vey of these rooms on that
-10-52				
sc.Rms.	7.R.White (RS)		Check spots on walls (approx 9 soft) in rooms after additional	Rm 1, 2 spots 1-8M Rm. 4, 1 spot 1-2M.
			decontamination attempts.	Rm. 5, 2 spots 1-54. Rm. 6, 2 spots 1-74.
•			Note: These walls were surveyed many times during the day as the	Rm. 10, 2 spots 1-10M.
			decontamination progressed. This is the final survey of thes	detected.
1 HP-46			rooms on that day.	
5 <b>2</b>				

SPECIAL SURVEY REPORT (				
Location	Requestor	Surveyor	Request	Results
12-11-52		•		
1	7. Rimkus (RS)	J. Wing	Check floor of Rm. 11 after de- contamination attempt.	General readings of 0.5M. A sign was posted on the door i dicating that shoe covers sho be worn by all personnel enterthe room.
2-12-52	W.R.White (RS)	J. Wing	Check spots on walls (approx. 9 sq. ft) in rooms after additional decontamination attempts.  Check the linoleum floor covering in rooms 34,35,36 and 37 for any activity prior to removal.	Rm. 10, 2 spots 1-2M. Rm. 11, 2 spots 1-1M. Rm. 11, 2 spots 1-1M. Note: These walls were surve many times during the day as the decontamination progress. This is the final survey of rooms on that day.  A general level of 1-10M was found on the linoleum in rms 34,35,36, and 37. An attemption of the decontaminate it.
isc.Pms.	W.R.White (RS)	J. Wing	Check spots on walls (approx. 9 ft. sq.) in rooms after additional decontamination attempt.	Rm. 1,6,10,11- No contamina detected.  Note: These walls were surmany times during the day a decontamination was in programs is the final survey of these rooms on that day.
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