VOID SHEET

TO: License Fee Management Branch

FROM: III - James R. Mullauer

SUBJECT: VOIDED APPLICATION

Control Number: 304297

Applicant: Bayer Corporation

License Number: 13-02249-01

Docket Number: 030-04336

Data Voided: 8/24/98

Reason for Void: The licensee needs to perform a close-out survey prior to releasing certain facilities for unrestricted use. Since this is a major effort and will take a considerable amount of time, it was suggested and the licensee agreed that this action should be voided out. The licensee will provide the results of the closeout survey in a new amendment request at a later date. The licensee should be reimbursed any fees paid.

Date 8/24/98 Signature

Attachment: Official Record Copy of Voided Action

FOR LFMB USE ONLY

Refund Authorized and processed

No Refund Due 50 (930/98

Fee Exempt or Fee Not Required

Comments:	Log completed
	Processed by:

BE	TWEEN:	1	(FOR LFMS USE) INFORMATION FROM LTS	
Li	cense Fee Management B	ranch, ARM	Program Code: 03420	
Re	and gional Licensing Secii	ons	Status Code: 0 Fee Category: 3M Exp. Date: 20001231 Fee Comments: 3M EFF 1/8/93 Decom Fin Assur Reqd: N	
LI	CENSE FEE TRANSMITTAL		i de tr	_
Α.	REGION		O. turner Del	979
1.	APPLICATION ATTACHED Applicant/Licensee: Received Date: Docket No: Control No.: License No.: Action Type:	BAYER CORPORATION 980810 3004336 304297 13-02249-01 Amendment	Mid 10/22/018	AUS 19 PH 2
2.	FEE ATTACHED Amount: Check No.:			: 29
3.	COMMENTS		da	
		Signed	Philip Lad	
в.	LICENSE FEE MANACEMENT	Date		
1.	Fee Category and Amou	Int: 3M	n milestone 03 is entered (\underline{Y}_{-})	
2.	Correct Fee Paid. Ap Amendment Renewal License	plication may be p	rocessed for:	
3.	OTHER		ar ar an	
		Signed Date		
			Log <u>Akg</u> <u>H</u> Remitter Check No. Amount Fee Oategory <u>3M</u> Type of Fee <u>AMD</u> Date Check Rec'd Date Completed By:	Des 400 (20/2000) Conservation (20/2000) Place 400 (20/2 20/20 (20/2 20/2) Place 400 (20/2 20/2 20/2 20/2) Place 400 (20/2 20/2 20/2 20/2 20/2) Place 400 (20/2 20/2 20/2 20/2 20/2 20/2) Place 400 (20/2 20/2 20/2 20/2 20/2 20/2 20/2 2

. . .

Bayer

Business Group Diagnostics

Bayer Corporation 1884 Miles Avenue P.O. Box 70 Elkhart, IN 46515-0070

August 4, 1998

Materials Licensing Section U.S. Nuclear Regulatory Commission, Region III 801 Warrensville Rd. Lisle, IL 60532-4351

RE: Bayer Corporation, Elkhart, Indiana Byproduct Material License #13-02249-01 License Renewal\Extension

Materials License Reviewer:

In compliance with the rule "Timeliness in Decommissioning of Material Facilities", NRC Administrative letter 96-05, Bayer Corporation, Elkhart, IN submits the enclosed information.

The location of material use and/or storage will continue to be limited to the principle campus at 1884 Miles Avenue, in Elkhart, Indiana. All previous address references were deleted in May 17, 1993 letter, and March 4, 1995 letter detailing company name change with address street re-named to 1884 Miles Avenue. The Radiation Safety Officer, Shannon Gleason, and all other aspects of the Radiation Safety program continue as approved previously.

Certain buildings on the campus that utilized isotopes in the performance of research have been discontinued. NRC Administrative letter 96-05 recommends initiating the decommissioning process when "there has been a 24 month duration in which no principal activities have been conducted under license at the site or at any separate building". In consideration of this statement we are enclosing close-out surveys of rooms used in Buildings 3 & 9 on our campus. As these buildings are vacated, they may continue to be used for research or they may be torn down, as the future use is to be determined. However, in either case their principal use activity as licensed facilities will cease.

As research laboratories, some rooms were used occasionally for conducting pharmaceutical research with radioactive materials. These occasional uses were followed by routine wipe testing and close-out surveys after a period of inactivity. Both buildings were used under the management of an Isotope Safety Committee, a Radiation Safety Officer, and Area Radiation Safety Supervisors to manage the safe use of radioactive materials. During this period of time the Radiation Safety Officer was Kenyon D. Yoder. Several areas in Building 3 had limited and occasional use of H-3 and C-14 during the 1970's. Building 9 was used more extensively during the 1970's and 80's, with decreasing use during the late 1980's until only several rooms were in use in the early 1990's. Principle isotopes used were H-3; C-14; I-125; P-32 and occasionally Fe-59.

Pm; 8-5-98

304297

RECEIVED AUG 1 0 1998 **REGION III**

Pursuant to the "Timeliness Rule" we request removal of the research laboratories in these two buildings from our licensed activities, with permission to revert the facilities to either other use or destruction. The only remaining facilities on this campus that are to be available for isotope use will continue to be the Building 18 research laboratory area, Building 17 research laboratory area, and the Building 9 basement maintenance core, which continues to contain the radioactive waste cage and pathological incinerator.

We trust the contents of this letter contain the information necessary to process this license renewal. If you have further questions, please phone (219) 262-6578.

Very truly yours,

Bayer Corporation

Shannon Heason

Shannon Gleason, Ph.D. Radiation Safety Officer

DATE: 8-11-98

CORRESPONDENCE CLARIFICATION SHEET

REVIEW	ER:	MONTE PHILLIPS/S	ANDY FRAZIER	
LICENS	EE :	BAYER		
LICENS	E NUMBER:	13-022	49-01	
The fo is not corres to <u>Deb</u>	llowing correspon clear what actio pondence and indi bie Hersey, or Ry	dence has been re n(s) is(are) requ cate which of the <u>an Te,</u> as soon as	eceived from the above l wired: Please review th following applies, and possible.	icensee and it is please return
A P	dditional Informa Process in as a ne	tion to Control M w action, additio	lo nal information, and no	fee required.
	Process as new lic Control No combined with curr	ensing action. Frent in-house action	Review has already been and this informat	started on ion cannot be
	an be combined wi	th Control No	Review has	not started.
A	Appears to be info	ormation for the 1	license file - file it.	
	icensee is adding	Nuclear Pharmac	ists.	
L ¢	Amendment is neces	ssary Ame (In	endment is not necessary nformation for license f	(ile)
	icensee is adding	authorized user:	5.	
	A check is include	ed I	No check is included	······ *
1	Amendment is neces	ssary	Amendment is not necessa (This is a Notification)	ary
	Process in as a ne A. Amendment B. Renewal C. New License Ap	ew licensing actio	on: Deleter	locations of use
	Other:	Theels New Free	Your Hololl	01/20/00
		Indik tou for	Tour neipiti	01/20/90

Room No. Industrial Products Building No. 3 D.M. Haggerty Area] Temporarily closed for isotope use. Permanently closed for isotope use. Timps I. yrdes Sygnature Fit. 15,1980 Date This area was closed to isotope use on Fit. 1, 1980 and will not require wipe testing or area surveying until reopened. This area was not in use from _____ to Radiological Control Officer Fut. 15, 1950

23 FEB77

E AREA SURVEY REPORT

For a while, at least, no introactive work will be done in our dres. The "C glycine HC and glycindmide HC dre being shred in Ron Sommer's refrigerated isotope storage tree, Blog. #9.

on

The work was wype tested as free from "C contomination. All slassware, etc. has either been wipe tisted and shown to be free of "C, or alisposed.

Exit H Bldg 3J 2nd floor

A. Schue. de :s which may be appropriate at a given time, imeter Whatman No. 1 filter paper disc, moistened wiped across a representative area; after im the center of the disc and placed in a iene:PPO:dimethyl POPOP scintillator. The

resulting samples are counted three times in a Yackard TRI-CARB spectrometer for 5 minutes or to 10,000 counts in a configuration such as to detect both ²H and 14C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate.

Results in CPM

Aftera Before Afters Before AREA 14C 3H 14C 3_H 34 140 3_H 140 Background 8 28,8 1 9 10 11 12 5 13 6 14 7 a. after decontamination with 50% E. Rend DATE: 23 FEB 77 SIGNED:

Room No. 2nd flow Building No. 3K Temporarily closed for isotope use. X Permanently closed for isotope use. Jan: 14, 1987 - Tenym J. Jody Date Signature This area was closed to isotope use on and will not require wipe testing or area surveying until reopened. This area was not in use from _____ to

Date

Radiological Control Officer



CPM	Before De 3-H	comtamination 14-C	After Deco 3-H	ntemination 14-C	Date Jan. 3, 1983
Background	_39	21			Name 1/2 - labors
Area A	64	23	an and an and an and a second		mane / / 200 - 10 Mine
Area B	30	28 .			
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Area F		And to show the standard strength of the stand	and the second sec		REPORT
Area G		water the stand of the standard	and any constant on an and the spect		121
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Area I					
Area J				tradition of the second second second second second	
Area K					
Area L	17	34			
Area M P -	28	03			
Q.	38	27			

Room No. 213	Building No. 9, Basement	
Temporarily closed for isotope	use.	
Permanently closed for isotope	use.	
<u> </u>	Kenter Joder Signature	
This area was closed to isotope use and will not require wipe testing o	on r area surveying until reopened.	
This area was not in use from		_ to

Date

Radiological Control Officer



Each numbered area, and those others which may be appropriate at a given time, will wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 1 of a toluene:PPO:dimethyl POPOP scintillator. The resulting samples are counted three ti in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration suc as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe te will be defined at negative unless the observed count rate is in excess of three times th background count rate (_____CFM).

	3CI	PM		>	
Area	H Before	Aftera	Area	H Before	Aftera
1	139		8	127	
2	354		9	124	
3	381		10	256	
4	300		11		
5	224		1.2		
6	470		13		
7	116		14		

a. after decontamination with _____

Form # 4.378 (9-70)



Room 100 213

Each numbered area, and those others which may be appropriate at a given time, will wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50 ethanol in distilled water, is wiped across a representative area; after drying, a 5/8' 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing of a toluene: PPO: dimethyl POPOF scintillator. The resulting samples are counted three t in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration st as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe t will be defined at negative unless the observed count rate is in excess of three times 1 background count rate (57 CPM).

	Background sayipps	PM		1.			()
Area	befoie Proj Before	Aft	era	<u>b</u>	Area	Before	After ^a (8
1	5-3-83 118	294	303	136	8		8 1
2	83	186	144	99	9		368
3	191	360	291	316	10		70
4	78	165	539	117	11		67
5	385	41788	401	291	12		
6	1200	8727	6 * 7 5	300	13		
7	150	2182	116	71	14		

Form # 4.378 (9-70)

Radioisotope Area Survey Report

ARL - E

Doto 26 Nov 73

Each numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm. diameter Whatman No. 1 filter paper disc moistened with 0.2% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is <u>counted three times</u> in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in datail on the back of this sheat. The decontaminated area is wipe tested again and the count recorded in the table below.



area	Jsed Since Last Swabbing ? Isoto	O Swab	BKGD Swale	Decontamination BKGD	Signature
1		335	320	and an a second state of a second state of a second state of the second state of the second state of the second	46.001
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4	en, construir enternande destruction and and a service and the Constructions	3.10	320	AND CARLON CARDING A GARDING AND	Jen
<	enternetingen under sonen en		۲.	an a she sa shakara na china data wita a 10 data da daray na gantan manan. Ta ar ang	
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9	na landa en la constante en la P		·		Sectore and a default of the sector of the

TOXICOLOGY DEPARTMENT Page MILES LABORATORIES, INC. Date 7/23/84 Project No. CH22-602 Title Radiation Swipe Jest Animal Room 409 DOOR 2 4 3 COUNTER TOP TABLE SINK 5 6 DOOR BLANK: 36 cpm Cpm SAMPLE Cpm SAMPLE BEFORE AFTER BEFORE AFTER :18 535 5 53 1 72 6 60 23 63 7 55 8 56 42 9 4 60 53 chair

Sandra Q	Pavek 7-24-84
Signature	Date

Study Director

Room No. 410-412 Building No. Bldg. 9 Basement

Temporarily closed for isotope use.

Permanently closed for isotope use.

Syst. 26,1980 Temps fordy Date Signature

This area was closed to isotope use on Sept. 26, 1980 and will not require wipe testing or area surveying until reopened.

This area was not in use from _____

Sept. 26, 1980 Temper from Date / Radiological Control Officer

to

KADIOISOIDPE MAEA OUNVEI METONI

Area monitored: BLDG. 9. BASEMENT



Each sumbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" x 1]/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml. of a toluene:PPO:dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB spectrometer for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and 14C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed c what rate is in excess of three times the background count rate.

Results in CPM



Room No. 1101 + 1103 Building No. 9 Wing , Floor 1 Temporarily closed for isotope use. Permanently closed for isotope use. NN. 7, 1980 Kinger D. fraly Date Signature This area was closed to isotope use on____ and will not require wipe testing or area surveying until reopened. This area was not in use from _____ to

Date

Radiological Control Officer

65

Dale 11-7-50

Test accomplished by David Clifton

Purpose and Procedures

To monitor the radiation spillage and contamination of beach areas (work areas) by a weekly program of performing wipe tests. These tests will be performed on Friday on all areas that had been used for radioisotope work during that week. The results will be recorded in duplicate, with one copy sent to Kenyon Yoder, and one copy for the file.

The test will be accomplished in the following manner: Use a clean alcohol such (alcohol prep for cleaning finger tips) and wipe a representative portion of the work area. Place this prep in a disposable plastic counting type and count the activity using GAMMACORD, Record this count in the appropriate space below. Repeat this procedure for all areas which were used for radioactivity.



COUNTS PER MINUTE

WORK AREAS	BACKGROUND	ORIGINAL	WASHED
1 建绘	1801	180	
		180	
H a		150	
		200	
4 6		180	
11 2		195	
6		190	
3 5		170	
Ŧ ç		150	
E		180	
11		180	

KADIO: SOTOPE AAEA SUAVEY REPORT



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moiste with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8" \ge 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml. of a toluene:PPO:dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB spectrometer for 5 minutes or to 10,000 counts in a configuration such as to detect both 3 H and 14C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. $30 \times 3-90$ CPM

Results in CPM





Cach area used for isotope work is writed. Willey with a disk of millipore mitro telle ich filter 3.5 cm. in diameter. The filter is moretand in a 50% solution of ethanof before with the area. The paper is dried, then placed in a cantillation wish with 10 mes of toluene 0.42 ppo: 0.01 To POPOP and counted for five minutimes 3.

area # 1 cts per minute 1 21.1 2 23.5 3 23.5

area # 2 cts pur minute, <u>20.3</u> 2 21.1 3 17.1

1 18.5 Obs per minute 2 15.1 3 221

Room No. 1104A/ 1042 Building No. 7 Glieray Research Lab. Temporarily closed for isotope use. Permanently closed for isotope use. Date Date Signature This area was closed to isotope use on_____ and will not require wipe testing or area surveying until reopened. This area was not in use from _____ to

Date

Radiological Control Officer

Date: December 12, 198 Signed: D. P. Wilson

Area minitered: Plag. 9 Floor I Wing I 41 3121 molecular Biology

- William

Bench	Top			
				(
50	Bernah.	Tono	Loctope Loctope	

Each tray word for isotope work is wiped weekey with a choice of Whatman I filter paper 4.54 cm. in diameter. The filter paper is moistened in a 50% occution of ethanol before wiping inays. The paper is drued and a strip 5/8"x1"/2" is cut from the center of the filter paper disk. This is placed in a Becteman scincillation wal of the cheaper grade with 15 mes of toluene: 0.4% PPO: 0.01% POPOP and counted for five minutes.

Bacezground 38 cts. perminute counts per minute # 2 _66 Note: area closed 12/12/80

Signed: M. J. Miller Rm. 1104D HOOD X TABLE AREA NORK AREA 204 DESK #3 plt meter #2 BENCH AREA SIN

Each area used for isotope work is wiped weekly with a disk of millipore nitro cellulose filter, 2.5 cm. in diameter. The filter is moistene in a 70 % solution of ethanol before wife the area. The paper is dried, then placed ind scintillation vial with 10 mls. of toluene 0.4 PPO, 0.0, 070 POPOP and counted for two minu times 3.

area # 1 area #2 cto per minute 1 28.5 cto per minute 1 18.0 2 23, 5 2 23.0 3 23.0 3 22.0

Background # 3 cts per minute 1 16.5 2 18.5 3 29.0



Cach area used for isotope work is wiped willing with a disk of millipore mitro celle less filter 3.5 cm. in diameter. The filter is motister. in a 50% solution of ethanof before wipin the area. The paper is dried, then placed in a scincillation vial with 10 mes of toluene 0.4 ppo. 0.01 % POPOP and counted for five minu times 3.



Room No. 1105 A BU	ilding No ?
Temporarily closed for isotope use Permanently closed for isotope use	
<u>M.m. 8, 1787</u> 1 Date	Tingen Hoch Sägnature
This area was closed to isotope use on_ and will not require wipe testing or ar	ea surveying until reopened.
This area was not in use from <u>M</u> . <u>Die</u> 7 1987 Tuted for the me eigen and then beind. I muse un J. Pulsguin NONA	inisist in Dec 11, 1387 storing mere only material tourowel - Birt groups.
[) ez . 15/1987 Date	Radiølogical/Control Officer

Area Monitored: Room 1105A Bldg. 9 Signed: Ramunas Bry

Each numbered area and others which may be appropriate at a given time, will be wipe tested as specified. A 5 cm. diameter Whatman No. 1 filter paper disc, or one cut to fit a scintillation vial, is moistened with 50% athanol and wiped accross each specified area covering a sampling of 100 cm². The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect B=3, C=14, S=35, or P=32. An appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are to be scrubbed down with soap and water, commercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office.



	СРМ			СРМ			CON	
Area . 1	Before 61.0	After ^a	Area 1	Before	After ^a	Area 8	Before	After
2	15.0		2			9		
3	64.0		3			10		
4			4			11		
5			5			. 12		
6			6			13		
7			7			14		
			4.	after deconta	mination with		4	

SAM	PDS	ΞH	CPM	251.9%	11992	EL	TIME	AVG 1-#		EI
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S-46)		CH	1.07% ba	2S (37,	.: .: NE	17)	1. 1. 2.4 E.,	-√C 144		(T)
Prov	.' 43.		32.50 40.00 57.50	55,47 30.(.) 81.70	0,40		C . 97	44.O	FlooR	

Sab tredut Marcia Greko

Date: 4/14/15-Signed: M. Suka

Radiciostope cineas Survey Report area minitered : Bridg G. Fleur / Lings Br 1105A

Rm 1105A

Background

cts per minute



Each area used for isotope work is wight wulley with a disk of millipore mitro celle los filter 2,5 cm, in diameter. The filter is moistanid na 50% solution of ethanof before wising is area. The paper is dried, then placed in a scintillation vial with 10 mes of toluene 0.42% PPO. 0.01 To POPOP and counted for five muricia times 3.

area # 2 area #1 cto per minute, 21.0 cts perminuter 1 19.4 2 32.2 3 41.0 3 31:2 ave: 23.4 anc = 31.4

2 28.8 3 31.0 auc: 28.0

1 24.2

RADIOISOTOPE AREA SURVEY REPORT



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" x 1]/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml. of a toluene:PPO:dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB spectrometer for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and 14C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate.

	PERSONAL PROPERTY OF	CANAL PROPERTY AND IN CONTRACTOR	and the second	Result	s in CPM				
AREA	Befor	e	Afte	era	AREA	Befo	ore	Aft	er ^a
E ha hade a	3 _H 1	4c	3 _H	14c		3 _H	14 _C	3 _H	14c
Background 1	29.0 23.0 28.0 49.0 23.0	37.0 29.0 37.0 59.0 34.0			8 9 10 11 12 13 14				
	a.	after de	contam	ination with SIGNED:	Rat	for (74	hec	km)
as of 5/16/75 This area and laboratory well no									

Carol Terry Mary Lou Buchanan

1/29/73 Date;

Realisistops linea Survey R: port signed: Area minitered: Bidg 9. Flows 1 Wings Rm 1106 A miniteredans Biology



Cach area used for isotope work is wiped weekly with a disk of millipse mitro celle less filter 3.5 cm. in diameter. The filter is moistand in a 50% solution of ethanof before wiping the area. The paper is dried, then placed in a scintillation vial with 10 mes of toluene 0.4 1% ppo: 0.01% POPOP and counted for five minute times 3.

3 H C 14 C 3H area # 2 area # 1 25.4 ets per minute, 30.8 25. 20.6 cts perminute 1 2 26.0 23. 25.6 23.0 3 24.4 22. 30.6 25.4 3

25.2 25.6 Background 2 27.6 27.0 cts per minute 1 -3 30.8 26.6

M.L. Buchnon B. JANIK

RADIOISOTOPE AREA SURVEY REPORT

Area monitored:



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" x 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml. of a toluene:PPO:dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB spectrometer for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and 14C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate.

Results in CPM

ARFA	Before	Aftera	AREA	Before	Aftera
	3 _H 14 _C	3 _H 14 _C		3 _H 14 _C	3 _H 14 _C
ackground 1 2 3 4 5 6 7	36,5 33,9 49.6 31.4 32.0 32.0		8 9 10 11 12 13 14		
DAT	a. after o E: Ectober 10	decontamination with	Ronald	Somme	2

Room No. 1107 + 1108 Building No. Temporarily closed for isotope use. Permanently closed for isotope use. April 8, 1988 Turfon Goder Date/ Date/ Signature This area was closed to isotope use on and will not require wipe testing or area surveying until reopened. This area was not in use from to

Date

Radiological Control Officer

AREA SURVEY REPORT (G-M Survey Reading)

Procedure:

Each designated area is to be surveyed weekly with a geiger counter containing an end window thickness of no more than $1.4 - 2.0 \text{ mg/cm}^2$. This instrument must have been calibrated against a known cesium - 137 reference source. Indicated readings will be recorded, while actual exposure will be determined from the calibration factor for the probe.

In searching for contaminated surfaces, the probe should be moved slowly over the surface approximately 1 inch above the surface (to prevent contamination of the probe). Areas indicating contamination above background will require a subsequent wipe test.

General area surveys are best performed by holding the detector away from the body at waist level and tracing a systematic path through the area, noting any rise in radiation level and marking these spots either directly with chalk or on the diagram below. Radiation levels above background will require determination of direction of source and reason for elevated readings. Background readings away from work areas will normally range from 0.01 - 0.02 millirem/hour (mR/hr).

Room Lavout:







Radioisotope Area Survey Report

Area Monitored: Bldg. 9, Wing 1, Floor 1

Each numbered area and others which may be appropriate at a given time, will be wipe tested as specified. A 5 cm. diameter Whatman No. 1 filter paper disc, or one cut to fit a scintillation vial, is moistened with 507 ethanol and wiped accross each specified area covering a sampling of 100 cm². The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect 8-3,C-14,S-35, or F-32. An appropriate blank from a noncontominated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excass of three times the background count rate. Contaminated areas are to be scrubbed down with scap and water, commercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Ratain a copy of this report and send original to the Radiation Control Offices.



Date: March 23, 1988

Signed:









a. after decontamination with

Radioisocope Area Survey Report

Area Monicored: Area 1107

Date: 296 Signed:

Each numbered area and others which may be appropriate at a given time, will be wipe tested as specified. A 5 cm. diameter Whatman No. 1 filter paper disc, or one cut to fit a scintillation vial, is moistened with water and wiped accross each specified area covering a sampling of 100 cm. The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect phosphorus-32. An appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are to be scrubbed down with soap and water, commercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office.



Bldg. 9, Flour A, Wing

Counts Per ____ Minutes

Area	Used Since Last Swabbing?	Isotope	Orig Swab	inal BKGD	After D Swab	econtaminati <u>5%</u>	on <u>Signature</u> GD
1		140	800	40	45	. 4	o DERe
2		14 C	353	45	144	50) D. E.R.
3						a nanonana a ana ana ana ana ana ana ana	ann arainn an Mallindirat, Fransachana an an
4						999 C 1999 I	nad rak danagaka kanargan an ar - tag dah oo di nga adaga daga ke
5							
6			-			ranna ann an San Ann ann an San A	ng akabasa kawalaksa adama antikara sekananan karang karang karang karang karang karang karang karang karang k
7							
8		an a	ANTER ANTOINE AND ALL ALL ALL ALL ALL ALL ALL ALL ALL AL	an a tha an ann an an ann an ann ann ann ann a			ang pandadan dan sakalah diray dili kana sakalah dan saga sa
9		*		an dan sign oon yn yn Alad y faan yn Alad			an an Ar An Thail ann an An Ar Chail an Ann An A
10	and a set of the loss of the spinor of an and a set of the set of t	and an an and the second s	Later and explore and finance	an antangergeneration and an antangeneration. Society	and a manager of the opposite of the state o	an a de calinge este esta de la desta de la de la desta de la d	and a second


Room No. 1205

Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8 \times 1 1/2$ " strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both 3 H and 14 C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three

14	C	PM		CPM	1
Area /7	<u>C</u> <u>Before</u>	Aftera	Area	Before	Arter
1	545	569	8		
2	891	168	9		
3	341	171	10		
4	188	143	11		
5			12		
6			13		
7			14	,	

AREA SURVEY REPORTING STATUS

miscellaneous Room No. rooms Building No. 9 X Temporarily closed for isotope use. Year 1980 Permanently closed for isotope use. - Kurpriz frag Dec. 30, 1980 This area was closed to isotope use on_ and will not require wipe testing or area surveying until reopened. This area was not in use from to Through at the year various lake are used on a tenfray, short time tase For the location they are served dining or immediately after nee before releasing to general me again. Date Date Radioløgical Control Officer



Room No. 1205

Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8 \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (270 CPM).

	CPM			CPM	
Area	Before	Aftera	Area	Before	<u>After</u> ^a
1		1155	8		
2		-	9		
3		-	10		
4		946	11		
5			12		
6			13		
7			14		
	a. after deco	ntamination with	_ count q	f	



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" x 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO:dimethyl POPOP model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (-762 CPM). H 76 x 3 = 228 -28 . HC 25x 3 = 84

3	14 CP	M		CP	M
Area H	<u>C Before</u>	Aftera	Area	Before	Aftera
164	18		8		
2 59	20		9		
3 22	18		10		
4 30	21		11		
5			12		
6			13		
7			14		
	a. after deconta	mination with			

Form # 4.392 (11-70)

Radicisotope Area Survey Report Area Monitored: TRD-4	Date: 4.15 Signed: Da	-80 vid Clifton
	514	1K
	4	
	DRA	3
	2	•
		• -

ROOM 1116

Each numbered area, and those others which may be appropriate at a given time, will wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 1 of a toluene:PPO:dimethyl POPOP scintillator. The resulting samples are counted three time a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe te will be defined at negative unless the observed count rate is in excess of three times the background count rate (37 CFM).³H 37x3 = 11

	, C	PM $TC 76x3 = 48$		
Area 4 1 37	¹⁴ <u>Before</u> 24	After ^a Area 8	Before	<u>After^a</u>
2 42	19	9		
3 37	23	10		
446	17	11		
5		12		
6		13		
7		14		

a. after decontamination with





Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8 \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both 3 H and 14 C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate ($_{55}$ CPM).

	C PM			CP	м
Area	-Before After a.	<u>After</u> ^a	Area	Before	Aftera
1	6,090	361	8		
2	20,600	2,062	9		
3	12,821	1,354	10		
4	_	280	11		
5			12		
6			13		
7			14		
	a. after decontam	ination with	2 separates	washing with a	Comt-off

Borek Janik Ron Sommer

Date: 4/13/73

signed: Inald form Radicioetope cinea Survey Report area minitered : Birdg G. Floors I Wing I minceanean Bichagy

Rm



Cach area used for isotope work is wiped willey with a disk of millipore mitro eller less filter 2.5 cm. in diameter. The filter is moistand in a 50% solution of ethanof before wiping the area. The paper is dried, then placed in a coincillation vial with 10 mes of toluene 0.4.57 ppo: 0.01% POPOP and counted for five minute times 3.

, 76,8 area # 1 cts per minute 1 77.8 2 71.6 3 69.8. area # :. cto per minute 2 76.0 3 69.2

Background cts per minute 1 77.0 3 79.8

TOXICOLOGY DEPARTMENT MILES LABORATORIES, INC.

Page

Date 8/30/83 Project No. <u>HS10-602</u> Title <u>Radiation</u> Wipe Test Radioactive Area Survey Report Area Monitored: Toxicology - Rm 1120



8/30/83

Richard Helms Signature

Study Director

Date











Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" x 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate $(\frac{\$}{32} \text{ CPM})$.³H $\$_2 \times 3 = 246$ 72 ^{14}C $72\times 3 = 216$

	/4 CPM	-	CP CP	M
1244	C <u>Before</u> <u>After^a</u> 91.5	<u>Area</u> H 8 78	C <u>Before</u> F3.5	<u>After</u> ^a
2 99	¢3.5	9203	101	
3 117	79	10 /95	88	
4 63	74	11 91	82	
5 123	164	12		
6 90	79	13		
765.5	79	14		

a. after decontamination with



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8" \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate ($\frac{2}{3}$) CPM).

	120 Ton	PM		CP	M
Area	Before	After ^a	Area	Before	Aftera
x 21			8		
× 17			9		
× 19			10		
×16			11		
5			12		
6			13		
7			14		
	a. after dec	ontamination wi	th	under an ander ander ander ander ander an ander	



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8" \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate ($2 \swarrow CPM$).

	CPM			CPM	
Area	Before	After ^a	Area	Before	Aftera
1	31		8	26	
2	27		9	26	
3	25		10	25	
4	25		11	25	
5	25		12	2.5	
6	25		13	25	
7	24		14	×	
	a. after decont	amination with	6	TOH	



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8" \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (24 CPM).

	C PM		C PM	
Area	Before After ^a	Area	Before	Aftera
1	26	8	27	
2	28	9	24	
3	22	10	25-	
4	23	11	24	
5	26	12	25-	
6	24	13	24	
7	25	14 ×	<	
	a. after decontamination wi	th Etc	244	

AREA SURVEY REPORTING STATUS

Building No. 9 Room No. 1203 Temporarily closed for isotope use. Permanently closed for isotope use. Sept. 26, 1980 Kingh for Signature This area was closed to isotope use on Suf. 26, 1980 and will not require wipe testing or area surveying until reopened. This area was not in use from to Supt. 26, 1980 Date Radiological Control Officer





Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" x 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARE model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (169 CPM). ³H 169X 3 = 507

	3. C	PM	、 ・	? C1	PM
Area	H Before	Aftera	Area	H Before	Aftera
1			8	91	
2			9		
3			10		
4			11	HALIWAY THR.	
5			12	TINGENT TRPLE	339
6	241		13		
7	216		14		

a. after decontamination with _

Form # 4.377 (9-70)







Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" x 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate ($\frac{32}{72}$ CPM).⁷H $\frac{5}{2}\times 3 = \frac{24}{2}$

	C C	PM		4. /**	CPM
Area ³ H	C. Before	Aftera	Area ³ H	CBefore	Aftera
1 70	66		8 236	102	
2 132	72		9142	72	
3 69.5	77		10 8,195	1,101	
4 61	79		11 94	77	
5 3,255	449		12		
6 4417	G11		13		
7 4,423	594		14		

a. after decontamination with



?

Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8'' \ge 11/2''$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (24/) CPM).



AREA SURVEY REPORTING STATUS

Room No. 1204 B Building No. 7 Temporarily closed for isotope use. Permanently closed for isotope use. July 15, 1983 into This area was closed to isotope use on and will not require wipe testing or area surveying until reopened. This area was not in use from to Radiological Control Officer Date





Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8" \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (25 CPM).





Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8'' \ge 11/2''$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO:dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (24 CPM).





Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a 5/8" x 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (_____CPM).





Room No. 1205

Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8 \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluenc:PPO:dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (10.5 CPM).

		CPM				CPM		
Area		Before	Afte	era	Area	Before	Aftera	
1	Base 1	145,510	1197	310	8			
2	End 2	133,200	1168	290	9			
3	Sid ;	3,010	969	235	10			
4	sil 4	4,320	936	260	11			
5					12			
6					13			
7					7 14	+ (5)	2. 4	
	a.	after deco	ntaminati	on with	count-off + cop	riom water, is	angue aerount count-	



Each numbered area was monitored using a Picker Labmonitor No. 600081 with a 1.4-2.0 mg/cm² Halogen-quenched geiger tube, approximately 2 inches above the surface of the 100 cm² area.

The monitor was previously calibrated with a standard of 59 Fe, same as the 'Fe used when dosing dogs within the same area.

3.8 uCi of ⁵⁹Fe = 2,000 CPM

Room background = ~ 50 CPM

Area	Before	After ^a	Area	Be	fore	Aftera
1 Rom effe level	O. I m Rem/1	h	8			deserve and second second
2 wije Mank	250 cPm in	Gammacrit	9			
3 floor nige # 1	O above blass	the it	10			
4 floor maps # 2	O above blan	k	11			
5			12			
6			13			
7			14			

a. after decontamination with

G

AREA SURVEY REPORTING STATUS

Room No. 1217 Building No. 9 Temporarily closed for isotope use. Permanently closed for isotope use. Rimfor frely Signature 0 A. 7, 1980 This area was closed to isotope use on DAT. 7,1980 and will not require wipe testing or area surveying until reopened. It 1204B to This area was not in use from _____ Radiological Control Officer Ect. 7, 1980 Date



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8" \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (<u>34</u> CPM). ³H 34X3 = 103

	CF	M		CT	M
Area	HBefore	After ^a	Area	HBefore	Aftera
1	145		8	52	
2	73		9	85	
3	156		10	59	
4	46		11	110	
5	98		12		
6	213		13		
7	285		14		
	a. after deconta	mination with			

Form # 4.392 (11-70)



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8" \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate $(138 \text{ CPM}) \cdot ^3H / 38 \times 3 = 414$

	CP	1	7 14 -	CPM		
AreaH	'C <u>Before</u>	Aftera	Area H CB	efore	Aftera	14
1 125	84.5	H ''C	× 8 14,853	380.5	\$H 604.5	157
* 2 843	158	95	92648	453.5		
* 3 733.5	176.5	643	10 1,045.5	189		
4 102	69		11 1,827.5	300		
5 576	129		12			
¥ 6 1576.5	2.82.5	355 118	13			
\$7103,10	5.5	1674.5	14			
а.	after deconta	mination with	ount of + H20			
Form # 4.392	(11-70)	-	final water run	a		

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Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect will be defined as negative unless the observed count rate is in excess of three times the background count rate (23 CPM).



 F_{j}

Form # 4.392 (11-70)

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TOXICOLOGY DEPARTMENT MILES LABORATORIES, INC.

Page

Date 12/19/83 Project No. HS10-602 Title PDC/HDC iv Dat Study Pudioacture Room monitoring



Area	de-
1	54
2	27
3	60

Richard Helms 12/19/83 Signature Date

Study Director

Date

AREA SURVEY REPORTING STATUS

Room No. 2101	Building No. 9
Temporarily closed for isot	ope use.
Permanently closed for isot	ope use.
Azil 15,1486	Signature
/ Date	/ Signature
This area was closed to isotope	USP 07
and will not require wipe testin	a or area surveying until reonened
and with not require wipe testin	ig of area surveying anoth reopened.
This area was not in use from	to
	·
Dato	Padiological Control Officer

Radiolsotope Area Survey Report

D.ice:

4/15/

Area Monicored: Area 210

° n

Signed:

Each numbered area and others which may be appropriate at a given time, will be wipe tested as specified. A 5 cm. diameter Mnatman No. 1 filter paper disc, or one cut to fit a scintillation vial, is moistened with water and wiped accross each specified area covering a sampling of 100 cm. The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect phosphorus-32. appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are to be scrubbed down with soap and water, conmercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office. 3 1 RECEIVED E Bldg. 9, Floor 1, Wing 2 APR 1 7 1986 CORP. SAFETY & HEA. Counts Per | Minutes

Area	Used Since Last Swabbing?	Isotope	Orig	inal	Aftor Dagar	****	
		Bobbong se manarakanang	Swab	BKGD	Swab	<u>BXCD</u>	Stenetur
1	- yls	341	145	39			Col.
2	- ys	ч	43	bi			1
3	hes	к	40				
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5						an a tha an	
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2				аналана у. ролония у.			
	the second second residence in the second designed, a second second second second second second second second s	and the other party of the second sec					

Radioisotope Area Survey Report

Each numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm. diameter Whatman No. 1 filter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard some counting tube. Each such tube is counted three times in a some counting instrument such as the Auto-Commo Spectrometer or the Commo cord for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipe tested again and the count recorded in the table below.

Date June 10 1974

11



Laboratory Area # 2101

Counts Per ____ Minutes

Area	Used Since Last Swabbing ?	Isotope	O Swab	riginal BK 3D Swap	Decontamination Signatur
	1 ues	· 3H	1 27	83	
2	1100	34	28:	• 23 *	NAMES AND ADDRESS OF ADDRESS ADDR
		· 3H ·		23	ann an the state of the state o
4	ine	34	29	23	and an unit of defaulty over the specification and a second behavior of a second second second second second se
5	ne	зН	24	23	Ng ng na mga katala ng katalan ng katalan ng
6	he	3H	: 22	23	889 1 19 1 19 1 19 1 19 1 19 1 19 1 19
7		Tananalis sanan manusarisma ananani	ana ka 10 m ta	anti-dana a manda manya mangana kana kana kana kana kana kana kan	n for for which they in the for a built in the first sector of the sector
8		· .	, * 	antice in a constant in the product of t	an en en sen en sen En sen en sen
9		1	ancierses indentification and an	antenali	er Gauch i soch de Bauthern of Hill (1997) en stand 1997 for Chen, die Brever stand die kannet bestellte der 1

AREA SURVEY REPORTING STATUS

Room No. 2103	Building No.
Temporarily closed for isotope u Permanently closed for isotope u	se. E. Adam's orien
Jan. 30 /981 Date	Turper fortes pignature
This area was closed to isotope use o and will not require wipe testing or	area surveying until reopened.
This area was not in use from	to
Jan . 30 1981 Date	- Stanfas frolg Radjological Control Officer

API B Radioisotope Area Survey Report

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Date lawadey 29, 1981

Lach numbered area (see map below) and each additional area with its may be appropriate at a given time is wipe tested weekly. A 4 condiameter Whatman No. 1 filter paper disc moistened with 0.92 sodium chloride is wiped across a representative area. The disc is follow into a 3/4° sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as notative unless the observed count rate is more than three times the backgroung count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipe tested again and the count recorded in the table below.



Laboratory Area //C 2103

E. Adam's are

	Used Since Las	t				
<u>.</u> <u>a</u>	Swabbing?	Isotope	Original	After D	econtamination	Signature
		,25	Swab BKG	D Swab	BKGD	201
1	VES	Ű.	2700 5	40		(Jaxto
2	VES	1257	260 0	760		C. Sarbo
3	Ves	125-I	250 2	50		C. Sabo
4	VES	125-P	250 2	250		C. So be
5	,	and the second se			and a second	
6			errennen eine de Chadhar Cannon han rande transis Canana	anar a dar malandir any gana broka sitar ana ang bina da ang		
7			an an ainm ann an	n Tar sam an an an Alaman an an Anna a		
-	and the second	a da bak raditi mana anta ana mana indana ana				
		and the second		abaran like et all combany deform manamening or our		
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Radioisotope Area Survey Report

VII. B

Date 1.4.79

Latin numbered area (see map below) and each additional area whell may be appropriate at a given time is wipe tested weekly. A 9 c . dlameter Whatman No. 1 filter paper disc moistened with 0.92 define chloride is wiped across a representative area. The disc is faided into a 3/4° sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is consted three times in a gamma counting instrument such as the Auto-Garra Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as more ative unless the observed count rate is more than three times the backgroung count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipe tested again and the count recorded in the table below.



Bldg. #9, Floor #1, Wing #2

Laboratory Area #C 2103

Used Since Last Swabbing? Area Isotope Original After Decontamination Signature Swab BKGD Swab BKGD 125 YES 300 260 I'25 270 YES 325 T'25 3 230 VES 230 4 125 YES 315 290 5 6 7
Ail -D

Radioisotope Area Survey Report

Duto - 126 22, 1923

Each numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm. diameter Whatman No. 1 filter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below! A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipo tested again and the count recorded in the table below.



Counts Per 4 5 Minutes

	Area	Swebbing ?	lsotope	Original After Decontamination Swab BKGD Swab BKGD	Signature
	1 .	V		420 390	7. Upgger
	2	۰. ۲		430.	7. Yeage
	3	<i>V</i>	1	435	4. yeba
	4	1		150	4. yeba
!	5	V		420	4. glage
	6	V		410/	y. Ullag
1	7	V		412	7. (llage
1	5	V	maar kana dhe ny sala shicher ta anna dhe son denney same	430	1. yeage
	1:	./	navaridens srivernishtet. Fra panari van den andrinerati	410	4.11 phen

AREA SURVEY REPORTING STATUS

Room No. 2105	Building No7	
Temporarily closed for isot	ope use.	
Permanently closed for isote	ope use.	
May 17, 19 87 Bate	Henter Jody Signature	
This area was closed to isotope	use on	
and will not require wipe testin	g or area surveying until reopened.	
This area was not in use from		to

Date

6

Radiological Control Officer

Radiolsocope Area Survey Report Dute: 6/17/97

Area Monitored: Area 2105 Signed: M. Calific Signed: M. Calific Signed: M. Calific Signed: Bell 9-2, 1-27 P. Each numbered area and others which may be appropriate at a given time, will be wipe tested as specified. A 5 cm. diameter Whatman No. 1 filter paper disc, or me cut to fit a scintillation vial, is moistened with water and wiped accross each specified area covering a sampling of 100 cm. The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect phosphorus-32. ÅΠ appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are to be scrubbed down with soap and water, conmercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office.



Bldg. 9, Floor 1, Wing 2

Counts Per / Minutes Used Since Last Area Swabbing? After Decontamination Isotope Original Sichature Swab BKGD Swab 126. 28 ye ~ 2 34 3 4 5 6 7 3 9

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APL B Sudloisotope Area Survey Report

Each numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm diameter Whatman No. 1 filter paper disc moistened with 0.92 sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as uegative unless the observed count rate is more than three times the backgroung count rate. Any area found to be contaminated is decon-s taminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipe tested again and the count recorded in the table below.

Date Sept 7, 1979



Bldg. #9, Floor #1, Wing #2

Laboratory Area //C 2105

Used Since Last Area Swabhing? Isotope Original After Decontamination Signature Swab BKGD Swab BKGD 125 The 370 340 380 310 340 V 320 340 5 6 7



Diagnostics Division

Internal Memorandum

Date:	June 24, 1996
Subject:	The Discontinuation of the Radioistope Laboratoty by Immunodiagnostics
From:	Dan P. Wilson
To:	Kenyon D. Yoder

No radioisotopes have been used by Immunodiagnostics R&D since December 31, 1995. Our department will no longer used this isotope facility(2106A, in building 9) effective April 9, 1996. Our isotope inventory was reduced to zero as of the end of 1995.

The Diabetes department has taken over the facility, and they will continue to use the room until building is officially closed in 1996.

The room was decontaminated and wipe tests were performed on various areas in this room. The areas tested and the counting data are enclosed. The door knob was further decontaminated and recounted. The data showed that all areas are clean as of the 15th of April, 1996.

Dan P. Wilson

Dan P. Wilson Bldg. 9 Radioisotope Area Supervisor



PAGE: 1

USER: 2 ID: PRESET TINE: 5.00 SAT 12 SEP 1981 19:25 SAMPLE REPEAT: 3 CYCLE REPEAT: 1 SCR:N RS232:N H#: 1 AQC:N QCF:N CHANNEL 1-LL: 0 UL: 400 2SIGMA: 2.00 BKG SUB: 0.00 BKG 2SIG: 0.00 LSR: 0 CHANNEL 2-LL: 0 UL: 570 2SIGMA: 2.00 BKG SUB: 0.00 BKG 2SIG: 0.00 LSR: 0 CHANNEL 3-LL: 0 UL:1000 2SIGMA: 2.00 BKG SUB: 0.00 BKG 2SIG: 0.00 LSR: 0 DATA DALC: CPM. UNKNOWN REPLICATES: 1 NORM FACTOR:Q1.00000 HALF LIFE(DAYS):N SAM POS 05 CPM 2SIG% TIME EL TIME AVG H# COMP

EL TIME AVG H# sel 14.20 23.74 5.00 1 5.22 1.0 25.60 17.58 39.20 14.29 11.80 25.04 5.00 10.39 2.0 22.40 18.90 38.80 14.36 5 15.55 2.0 16.80 21.82 5.00 26.60 17.34 40.60 14.04 SAM AVG CFM(RNG) 1: 14.27(17.76) 2: 24.87(9.92) 3: 39.53(2.70)

2.0 17536.66 1.95 0.60 16.41 5 1 95229.98 0.84 95671.66 0.83 17383.33 1.96 0.60 3 17.14 1.0 0.84 95348.32 95738.32 0.83 17618.33 1.95 0.60 17.88 3.0 95108.32 0.84 95516.68 0.84

SAM AVG CPM(RNG) 1: 17512.77(0.74) 2: 95228.88(0.13) 3: 95642.21(0.13)

67126.66 1.99 0.15 18.27 -1.0 3 7 1 58046.55 1.98 68080.00 1.98 67720.00 1.98 0.15 18.53 1 -1.0 68700.00 1.97 68726.65 1.97 67073.33 1.99 3 7 1 0.15 18.80 0.0 67993.33 1.98 2 3 68013.33 1.98

SAM AVG CPM(RNG) 1: 67306.66(0.61) 2: 68246.66(0.66) 3: 68273.33(0.66)

22.20 18.98 5.00 24.07 80.0 8 1 32.80 15.62 43.80 13.51 4 8 20.60 19.71 5.00 29.23 80.0 1 30.60 16.17 45.40 12.27 21.60 19.25 5.00 34.38 81.0 A 3 31.80 15.86 45.20 13.30 SAM AVG CPM(RNG) 1: 21.47(4.04) 2: 31.73(3.57) 3: 44.80(2.23)





SAM POS CH CPM 2516% TIME EL TIME AVG H# ERR 38.60 14.40 48.20 12.88 3 5 9 1 24.20 18.18 5.00 44.87 81.0 1 35.60 14.99 50.00 12.65 20.00 20.00 5.00 50.02 84.0 5 9 1 2 31.60 15.91 3 41.80 13.83 SAM AVG CPM(RNG) 1: 23.00(13.04) 2: 35.27(10.40) 3: 46.67(10.43) 32.20 15.76 5.00 55.30 78.0 6 10 1 43.60 13.55 2 56.00 11.95 29.80 16.38 5.00 60.45 80.0 6 10 1 40.00 14.14 52.60 12.33 28.80 16.67 5.00 65.60 79.0 6 10 1 40.80 14.00 2 3 52.60 12.33 SAM AVG CPM(RNG) 1: 30.27(6.39) 2: 41.47(5.14) 3: 53.73(4.22) 34.40 15.25 5.00 70.88 81.0 7 11 1 2 45.00 13.33 56.20 11.93 3 43.20 13.61 5.00 76.03 80.0 7 11 1 53.20 12.26 63.40 11.23 39.00 14.32 5.00 81.18 82.0 7 11 1 50.20 12.62 62.60 11.30 SAM AVG CPM(RNG) 1: 38.87(11.49) 2: 49.47(9.03) 3: 60.73(7.46) 8 12 1 41.00 13.97 5.00 86.46 77.0 53.20 12.26 2 65.60 11.04 8 12 1 42.40 13.74 5.00 91.61 78.0 6 52.60 12.33 61.60 11.40 39.60 14.21 5.00 96.76 78.0 8 12 1 51.60 12.45 3 62.80 11.29 SAM AVG CPM(RNG) 1: 41.00(3.41) 2: 52.47(1.65) 3: 63.33(3.58) 9 13 1 17.00 21.69 5.00 102.04 77.0 2 27.60 17.03 38.20 14.47 9 13 1 23.80 18.33 5.00 107.18 76.0 2 34.60 15.21 45.20 13.30 22.00 19.07 5.00 112.33 77.0 9 13 1 . 2 32.00 15.91 41.80 13.83 SAM AVG CPM(RNG) 1: 20.93(18.79) 2: 31.40(12.10) 7: 41.73(8.47)

PAGE: 2

4-15-96 THE 1 Door Knob 2 Refrig Mandle 3 Inside Refug (Bottom) (4) Floor in Front of Frig 5 " " " Counter 6 BlK. Floor in Front of Bench. (7)

Fran



5.00 57.75

Di

ERR SAM POS CH CPM 2816% TIME EL TIME AVG H# 2 59.60 11.59 74.40 10.37 3 44.94 77.0 53.20 12.26 5.00 5 24 1 68.80 10.73 2 82.60 9.83 3 50,10 79.0 58.60 11.68 5.00 24 1 75.40 10.30 87.40 9.57 3 SAM AVG CPM(RNG) 1: 52.93(11.21) 2: 67.93(12.27) 3: 81.53(8.75) 35.60 14.99 5.00 55.37 82.0 6 25 1 47.80 12.94 3 59.80 11.57 6 25 1 34.20 15.29 5.00 60.52 83.0 2 43.80 13.51 54.20 12.15 27.50 17.03 5.00 65.68 82.0 6 35 1 39.80 14.18 54.40 12.13 SAM AVG CPM(RNG) 1: 32.47(14.99) 2: 43.80(9.13) 3: 56.13(6.53) 61.20 11.43 5.00 70.95 82.0 7 26 1 2 71.60 10.57 83.20 9.81 3 56.20 11.93 5.00 76.10 81.0 7 26 1 2 66.00 11.01 79.80 10.01 57.50 11.79 5.00 81.25 82.0 7 26 1 69.60 10.72 2 77.60 10.15 3 SAM AVG CPM(RNG) 1: 58.33(4.91) 2: 69.07(4.44) 3: 80.20(3.74) 40.50 14.04 5.00 86.53 85.0 8 27 1 53.40 12.24 2 66.00 11.01 3 41.40 13.90 5.00 91.69 85.0 8 27 1 53.60 12.22 70.50 10.54 5.00 96.34 84.0 46.00 13.19 8 27 1 57.80 11.76 71.20 10.60 SAM AVE CPM(RNG) 1: 42.67(7.81) 2: 54.93(5.22) 3: 69.27(4.72) 27.20 17.15 5.00 102.11 78.0 9 28 1 2 39.20 14.29 52.20 12.38 27.00 17.21 5.00 107.26 78.0 9 28 1 38.60 14.40 52.20 12.38 26.40 17.41 5.00 112.41 76.0 9 28 1 37.40 14.63 47.60 12.96 3 SAM AVG CPM(RNG) 1: 26.87(1.74) 2: 38.40(2.50) ;

PAGE: 2

PAGE: 3

-AM	POS	CH	CPM	25	IG% TIM	E EL	TIME AV	G H#				ERF
	10	29	1	29.40	16.50	5.00	117.72	82.0	-	~		
			2	40.00	14.14				1 .	1		
			2	51.80	12.43				11			
	10	29	1	26.20	17.47	5.00	122.87	85.0	1 1)		
			2	38.20	14.47				L :	/		
			3	53.80	12.19						**************************************	
	10	29	1	34.20	15,29	5.00	128.03	98.0				
			2	48.40	12.86			00.0				
			3	64.60	11.13							
S	AM F	AVG	CPM (RNG)	1:	29.93	(14.25)	2:	42.20(14.69)	3:	56.73(1	3.87

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PAGE: 1

SAMPLE REPEAT: 3 CYCLE REPEAT: 1 SCR:N RS232:N H#: 1 AQC:N QCF:N CHANNEL 1-LL: 0 UL: 400 2SIGMA: 2.00 BKG SUB: 0.00 BKG 2SIG: 0.00 LSR: 0 CHANNEL 2-LL: 0 UL: 670 2SIGMA: 2.00 BKG SUB: 0.00 BKG 2SIG: 0.00 LSR: 0 CHANNEL 3-LL: 0 UL:1000 2SIGMA: 2.00 BKG SUB: 0.00 BKG 2SIG: 0.00 LSR: 0 DATA CALC: CPM. UNKNOWN REPLICATES: 1 NORM FACTOR: 01.00000 HALF LIFE (DAYS) : N SAM POS CH CPM 2516% TIME EL TIME AVG H# ERR 74.20 10.38 5.00 5.21 80.0 1 20 1 2 86.60 9.61 100.00 8.94 3 74.20 10.38 5.00 10.35 81.0 1 20 1

2 87.60 9.56 3 98.20 9.03 1 20 1 68.20 10.83 5.00 15.49 79.0 2 80.60 9.96

3 93.20 9.26 SAM AVG CPM(RNG) 1: 72.20(5.54) 2: 84.93(5.10) 3: 97.13(4.05)



Internal Memorandum

TOXICOLOGY -HEALTHCARE

DATE:	April 26, 1995	ID: 95TOX047.DSG
SUBJECT:	Quarterly isotope inventory report	
FROM:	D. Grosso	
TO:	K. D. Yoder	CC: R. E. Hartnagel

No radioisotopes have been used by the department since the 2nd quarter of 1993. No future use of radioisotopes is planned. Our isotope inventory was reduced to zero as of the end of 1993. The laboratory space previously used for this purpose, room 2106A of building 9, has been converted to other purposes. The area was subjected to decontamination procedures to remove any possible contamination as reflected on the wipe-test report of October 12, 1993.

This license should be discontinued.

jrc Encl.

AREA SURVEY REPORTING STATUS

Room No. 1202 Building No. 9, Wing /	
Temporarily closed for isotope use.	
Oct. 12, 1993 Kunp O. Josh Date Signature	
This area was closed to isotope use on and will not require wipe testing or area surveying until reopened.	
This area was not in use from	to

Date

Radiological Control Officer

Toxicology Dept.

AREA SURVEY REPORT (Wipe Test)

Procedure:

Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 25 mm.-50 mm. (1-2 inch) diameter Whatman No. 1 filter paper disk moistened with 0.9% sodium chloride is wiped across a representative area (approximately 100 cm²). The paper disk is placed into bottom of disposable plastic counting tube and placed in counting well of Gammacord II and counted at optimum counting position. Each sample is counted three times for a minimum of five minutes and recorded below. A wipe test is defined as negative unless the observed count rate (in CPM) is more than three times background count rate. Any area found to be contaminated is decontaminated by an approved procedure. Resurvey the area after cleaning and record in table below.

Room Layout:

Room Number: 1202





12 Oct 93 12:47			2:47	MILES	LABORATO	Page	++ 1	
Protocol #:60				WIPE	TEST		 User	: SCP
unt T	ime(minutes):	5.00					
SBY 1	ype:		CPM					
ckgro	und Subtrac	ti	IPA Bkg					
Out	lier: ution Coera	tor :	5.0 FLA6					
Scr	eening:		OFF					
			Window A					
Nuc	lide:		1-125	15 - 75 keV				
8kg	1		26.8					
Sig	na:		0.00					
LCR	:		0					
Hal	f Life(hour	s):	0.00					
Mul	tiplier:		1.0000					
51	A:CPM A:3	ERR	B:CPM B:IERR	A:FRROR	CCPM RESULT	PAT/10		
1	0.0		0.0	AT ENTITY OF	0.000	RKS		
2	1.4 1	18.1	0.0		1.380	1		
-	1.2 4	11.2	0.0		1.180	2		
4	0.0		0.0		0.000	-		
¢	- 4 -	7 1	0.0		7 700	, ,		
	10 4	0 71	0.0		10.700			
ġ	10.4	217	V.V		101080	2		

RADIOISOTOFE AREA SURVEY REPORT



Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8" \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml. of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB spectrometer for 5 minutes or to 10,000 counts in a configuration such as to detect both ^{3}H and ^{14}C . An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background

			-	A	AREA	Befo	ore	Afte	era
AREA	Be	fore	Aft	era	<u>Michi</u>	34	14 _C	311	14C
	3 _H	14 _C	311	14C			and the other state of the same finds of the last of		
ackground	27	39 42			8 9				
2 3 4 5 6 7	31	42			10 11 12 13 14				
DAT	re:	e. after Etruary. Oreo	decontar 26, 197 2	nination wit 25 SIGNED: Childred	h Ponald	Som	me		

AREA SURVEY REPORTING STATUS

Room No. 2107	Building No
Temporarily closed for isotope u	se.
M Permanently closed for isotope a	
Aug. 15, 1988 Date	Kinghe J. frdy Signature
This area was closed to isotope use o and will not require wipe testing or	n area surveying until reopened.
This area was not in use from	to

Date

Radiological Control Officer

Radiolsotope Area Survey Report

Area Honicored: Area 2107

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Each numbered area and others which may be appropriate at a given time, will be wipe tested as specified. A 5 cm. diameter Whatman No. 1 filter paper disc, or one cut to fit a scincillation vial, is moistened with water and wiped accross each specified area covering a sampling of 100 cm. The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect phosphorus-32. appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are to be scrubbed down with soap and water, conmercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office.

D.

Signed:

Carrico



adioisotope Area Survey Report

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Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area: after drying, a 5/8" x 1 1/2" strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a configuration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (\mathcal{AC} CPM).



Date may 4, 1976

Several 14000

LABORATORY AREA 2107 This a new will not be used for hand ling rad bisotipes for at leas

Courts Per ____ Minutes

<u>Area</u>	Used Since Last Swabbing?	Isotope	Origi Swab	nal BKGD	After Decontar Swab	mination BKGD	Signatur
1	1.6 .	* H	24	29	1		6-Mga
2	k	. /,	23	29			1.,
3	6	٢,	43	29	. \		. (
4	11	4	22	29			4
. 5	ı	11	23	29		·	
б	<i>t</i> ,	1,	23	29		/	
7	it .	()	29	29			,
. 8	- U	4	19	29			/
9	. •	1, -	26	29)	
10	1	٩.	29	29		· · ·	-

Adi - D

Autioisotope Area Survey Report

Duto 4-16-74

Lach numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm. diameter Whatman No. 1 filter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the battom of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below! A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipe tested again and the count racorded in the table below.



4. Minutes

Area	Swebbing ?	Isotope	Swab	After Decontamination BKGD Swab	Signature
1	L	125-I	350	340	20/2/1
2	4	"	340	. 340	
 3	L		34)		
4	L	"	330		
5	L	11	3 30		and an optimum of the discustion of any of a first strength
					an sa un gan ann an canan a mun an tartartea
7				· ·	
8	na y panta defendente a estas na de la defendencia de la defendencia de la defendencia de la defendencia de la	aladina dagancentiske figeriskore, andenadin	-		
0	e en date de control de Mantena Construit, a mais er alage Sud-Andréa Andréa Articlea	stierstal sateraar welerigenaanskekone			

AREA SURVEY REPORTING STATUS

Room No. 2202B Building No. 9, Wing 2, F	loor 2
Temporarily closed for isotope use.	
Permanently closed for isotope use.	
April 13, 1982 Kinford John Date Signature	
This area was closed to isotope use on	
and will not require wipe testing or area surveying until reopened.	
This area was not in use from	_ to

Date

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1 5

Radiological Control Officer

Radioisotope Area Survey Report

11 ...

Lach numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm diameter Whatman No. 1 filter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gamma-Cord for a minimum of tour minutes and thcount recorded in the table below. A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. A area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipe tested again and the count recorded in the table below.



Form No. 4 H10

5 30 A the paper arse morstened the 33.4 "CV utative area. The disc is ed and placed into the bott is counted three times in a Spectrometer or the Gamma 22 CPM orded in the table below. . 3.4 %CV ved count rate is more than 26 CPM d to be contaminated is dece O 33,4 2CV 28 CPM edure is described in detai area is wipe tested again a 33.4 %CV 22 CFM 33.1 LCV 37 CPM 5 7.7 %CV 30 CPM 84 %CV 42 C.F. 7.2 % C \ AI CPM 4 2 7.2 X C V 15 CPM 7 5.7 2.CV 29 C.P. 8,4 %CV 3 29 CPM 34 %CV Rm 2202B 24 CPM XCV 9,1 ŧ CUI Isotope Origin. 48 CFN Swab 11 125 25 50,0 SCV 33 CP+ 60 1 0 1,0 XCV CP .. 33 34 4 · C . 24 35 CPM 27 7.7 YC V 43 CPL 59 30 5.9 110 / CPN 60 26 2CV 5,9 1 CPN 51 ~CV 5,9 52 CPA 5,9 SCV (8101 1 2 1 32 4.4 CV 35 694 BG 7.7 . 0 . 34 (04 7.7 °CV 10 CPM CV 2.4

ARL - K-Y

Radioisotope Area Survey Report

Each numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm. diameter Whatman No. 1 filter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipe tested again and the count recorded in the table below.

Date 11/14/69



Counts Per / the Minutes

Used Since Last Area Swabbing ? Original Isotope After Decontamination Signature Swab BKGD BKGD Swab 1st swabbin. .29 34 2 3 4 5 7 8 9 10



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BENCH YPE'A'RH

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Each numbered area and others which may be appropriate at a given time, will be wipe tetted as specified. A 5 cm. diameter Whatman No. 1 filter paper disc, or one cut to rit a scintillation vial, is moistened with 50% ethanol and wiped accross each specified area covering a sampling of 100 cm⁻. The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect both H and ^{-C}. An appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are to be scrubbed down with soap and water, commercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office.

	EPM .			CP	М
Area	Before	Aftera	Area	Before	Aftera
BK	49.5	**	5	9880.8	
1	979.6	108.5	6	219.8	88.1
2	2064 5	1037	7	173	
3	123.2		8		
4	110.2		<i>i</i> ,		
					1

a. after decontamination with Saaschung Mc / itor / ME / State

AREA SURVEY REPORTING STATUS

Building No. 9 Wing 2, Floor 2
ope use.
ope use.
<u>Sungar D. Lol</u> Signature
use on Mark 15, 1985 g or area surveying until reopened.
to
· · · · · · · · · · · · · · · · · · ·

Date

Radiological Control Officer

Radiolsotope Area Survey Report

Dare: 3-15-55 Signed: References

Area Monicored: Area 2204

Each numbered area and others which may be appropriate at a given time, will be wipe tested as specified. A 5 cm. diameter Mhatman No. 1 filter paper disc, or one cut to fit a scintillation vial, is moistened with water and wiped accross each specified area covering a sampling of 100 cm. The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect phosphorus-32. An appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are to be scrubbed down with soap and water, conmercial decontamination preparations, 50% ethanol, or other solvents apprepriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office.



Bldg 9, Floor 2, Wing 2, Rm. 2204E

	Counts Per Minutes
	Used Since Last
Area	Swabbing? Isotope Original After Decontamination Signature
	Contraction of the contraction o
1	The see that is there is a daman
2	The met and it will be antin
3	regimen the set to work with
4	dan in a tarker
5	
6	
7	
U	
9	
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Ail - Delinical Biochemistry

Radioisolope Area Survey Report

Duto 12-17-73

Each numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm. diameter Whatman No. 1 tilter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below! A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The docontaminated area is wipe tested again and the count recorded in the table below.



LABORATORY ROOM + 2204 A

Counts Per Sol Minutes Used Since Last After Decontamination Original Signat A:ca Swic'sbing ? sotopa BKGD BKGD Swab Swaly 3 : • 1" 31:2 2 3 4 5 6 7

ARL - Air Monitor

Nuclide 125-

Date 12-17-

Description of Areas:

- 1. Outside of radiolabel hood in front of hood (in Room 2204A)
- 2. Inside radiolabel hood at exit of cannister blower (in Room 2204A)
- 3. Lab bench in front of hood 89 (Room 2110C)
- 4. Cold room, upstairs (2204D)

5. Other (describe): - Outlet of nadrolakel hood

When air levels are greater than maximum limit, monitoring will continue until levels are found to be less than the maximum limit.

1.0 µc I¹²⁵ = 1,651,980 cpm on the Autogamma. The maximum limit is $4.8 \times 10^{-5} \mu c/600 \text{ L of air.}$.1,651,980 cpm x 4.8 x $10^{-5} \mu c =$ 79.3 cpm/600 L on the Packard is the upper limit if all the airborne iodine is trapped on the filter.

_ 1	Time	Date of Last Iodination	CPM Background	Gross Filter CPM	Net cpm/600L Air	(X 10 ⁻⁵) µCI/600L Air	Found Conc'n: * Max. Allow- able Conc'n.	Signa
_/	11:00	11-8-73	172	635	463		5.8	
2	11:00	11		7050	6888		86.7	
1	12:00	h		216	44		0.6 :	
2	12:00	4		214	42		0.5	
				/	/			
	1	Flow	ate c	anno	in alo	wer	95 cf/m	nin
	1	11	11 1	adrola	hel ho	od.	1150 CF/2	nu
5	11:30	95/1150	× 86,7				7.2	~
5	2:00	95/1150	X O.S			an a	0.04	N
	1							Pro d
							· · ·	Vil
-	1			composition and a second state of the composition of a second state.				
manufacture	1						1	
	1.							

ARL - D

Radioisotope Area Survey Report

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Date 4-29-34



Area	Used Since Last Swabbing?	Isotope Original Swab BKGD		Lnal BKGD	After Decontamination Swab BKGD	Signature		
1	BYES	125I	420	410		C , S.	Schwarf	
2	11	11	400	11		11	~1 0	
-								
B						a suffic available and a sufficient		
5	11	11	410	11		//		
6	/ (/1	400	11		11	, 1	
7	/1	//	430	11		11	11	
8	11	//	410	11		1.	11	
9								
10			and the second se					

Radioisotope Area Survey Report

Dato 5/26/73

Each numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A? cm. diameter Whatman No. 1' filter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times " in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipe tested again and the count recorded in the table below.



Counts Per 1 ; Minutes

Area	Used Since Last Swabbing ?	Isotope	Or Swab	iginal BKGD	After Swap	Decontan	BKGD	Signatur	e
1	yes	I-125	30	370			: • • • •	K.B.F.	14a (
2	1	1	20	. 370.	$\gamma_{A} \in A^{\alpha}$	i•			Citra unacroscian
. 3		1	10	370		CAN P	t transfer State		
4	•		20	370		and the state of the state	a propulsion in the same second differences	and a state of the state of the state	
5		•	30	370		19 - ant successful county for 107 Sec. 10	anagan di sa Jaka ng saka kang pinana dalah kana kang	Dudia site desaile frances	
5	V	V	20	370					
		and and the second s	i		ana ana amin'ny fan ana amin'ny fan director ta antara a		es ter Sortied Assessment and with faired spin and		
8	· ·				an the state and the state of the	ar du fois an taoir is Albert Phaoi			
9		and the second		NAME AND ADDRESS OF A DESCRIPTION OF A D	a per transport de la Celebradia de Calebrades de Ca	carsage Sciencific in the Association Science in the Cars	telefolderen an der ander an ander	dahadda Rhaayaalaadaa fad	NULL HOTHING
10	1			• *	•		·. ·		

AREA SURVEY REPORTING STATUS

Room No. 2206 A Building No. 9 Temporarily closed for isotope use. Permanently closed for isotope use. Oct. 27, 1994 Aunto your-Date 1 Date Jignature This area was closed to isotope use on and will not require wipe testing or area surveying until reopened. This area was not in use from <u>Maul 5,1992</u> Oct. 24, 1994 to Date Date Radiological Control Officer

RECEIVED BY

Key for white liest plamples (See attached graphic for precise locations)

2208A door handle
Lab bench top
Sink handles
Scintillation counter lid
Terminal
Retrigerator door
Floor around main work table
Drawer tronts on lab bench
Handles of Tritium waste bins
Handles of Iodine 125 waste bins

11. Background Other Samples

non

MAR - 6 1992

CORP. SAFETY & HEALTH

3-592

Samples were collected on ethanol saturated filter paper squares, then placed in scintillation vials with 10 ml of fluor, for counting. Counting was on all three channels for 5 minutes. Any samples 2X over background are too high and surfaces indicated are decontaminated and recounted until below 2X background.

Comments:

date

Send original with counts to K. Yoder. Retain copy for file.

Wipe Test Graphic for Room 2206A


AREA SURVEY REPORTING STATUS

Room No.	2206 B	Building No. 9-2	
Tempora	rily closed for isotope	e use.	
X Permane	ntly closed for isotope	e use.	
Sept.	28, 1989 Date	Dan P. Wilson Signature	
This area wa and will not	s closed to isotope use require wipe testing o	e on <u>Sept. 28, 1989</u> or area surveying until reopened.	
This area wa	s not in use from		_ to
		·	
	Date	Radiological Control Office	r

Radioisocope Area Survey Report Dute: 12-8-87

Area Monicored: Area 22063 Signed:

Each numbered area and others which may be appropriate at a given time, will " wipe tested as specified. A 5 cm. diameter Whatman No. 1 filter paper wisc, or .ne cut to fit a scintillation vial, is moistened with water and wiped accross each specified area covering a sampling of 100 cm. The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect phosphorus-32. Λn appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are to be scrubbed down with soap and water, convercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office.



		Cou	ints Per		inutes		
Area	Used Since Last Swabbing?	Isotope	Orig Swab	<u>sinal</u> <u>BKGD</u>	After Dec . <u>Swab</u>	contemination <u>3800</u>	Sichsture
1	12/12/201.	H ³	52	60	NO	need.	Allicharico
2	1.					and the second	
3							
4							
5			46	60.	1100	need.	
6	RECEIVED BY	and a second					
	DEC 1 3 1969						
Ł							
2	CORP. SAFETY & HEALT	Н	anna an an Anna an Anna an Churchai				
10	Naganaka salaka tular nakakan yaka takatik yang ata kuar naga na par kingka di kasa yang reputa kadu aka yakar	artanianak terat epinekan der yar eta manapartere	nananana salah di daga da anan di baga	an tanah menyakan kerjan ang ana mangangan	e name and a sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	and, and are real that a drawn of the set	aleanan é a reagann thé carner robain leoraige agus agus anns

RECEIVED BY

DEC 1 3 1939

CORP. SAFETY & HEALTH

PAGE: 1

ERR

USER: 2 ID:WIPE TEST PRESET TIME: 5.00. FRI 08 DEC 1989 15:13 SAMPLE REPEAT: 1 CYCLE REPEAT: 3 SCR:N RS232:N H#: 1 AQC:N QCF:N CHANNEL 1-LL: 0 UL: 400 2SIGMA: 2.00 BKG SUB: 0.00 BKG 2SIG: 0.00 LSR: 0 CHANNEL 2-LL: 0 UL: 670 2SIGMA: 2.00 BKG SUB: 0.00 BKG 2SIG: 0.00 LSR: 0 CHANNEL 3-LL: 0 UL:1000 2SIGMA: 2.00 BKG SUB: 0.00 BKG 2SIG: 0.00 LSR: 0 DATA CALC: CPM. UNKNOWN REPLICATES: 1 NORM FACTOR: 21.00000 HALF LIFE(DAYS):N

SAM	PUS	СН	CPM	2516%	TIME	EL IIME	AVG H#	
1	54	1	60.40	11.51	5.00	5.26	68.0	
		2	72.40	10.51				
		3	83.00	9.82				
2	55	1	52.00	12.40	5.00	10.57	66.0	
Berry	le .	2	63.40	11.23				
antit	time	, 3	76.80	10.21				
2	56	1	46.80	13.07	5.00	15.87	69.0	
Elim		2	59.80	11.57				
under	e	2	73.40	10.44				
Vials	wer-	lying						
CYC	LE:	2						

1	54	1	51.00	12.52	5.00	21.19	68.0
		2	65.00	11.09			
		3	77.40	10.17			

2	55	1	47.00	13.05	5.00	26.49	66.0
		2	57.80	11.76			
		3	71.60	10.57			
3	56	1	45.80	13.22	5.00	31.78	71.0
		2	55.80	11.97			
		3	68.60	10.80			

,* ÷

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CYCLE: 3

1	54	1	47.00	13.05	5.00	37.10	69.0
		2	57.20	11.83			
		3	69.80	10.71			
2	55	1	47.80	12.94	5.00	42.38	66.0
		2	57.60	11.79			
		3	70.40	10.66			•
3	56	1	45.00	13.33	5.00	47.67	72.0
		2	58.60	11.68			
		3	68.40	10.81			

DRP. SQUETY & HEALTH

BECEINED BA

Radiolsotope Area Survey Report Date:

Area Monicored: Area 2207 Signed:

Each numbered area and others which may be appropriate at a given time, will e wipe tested as specified. A 5 cm. diameter Whatman No. 1 filter paper disc, or one cut to fit a scintillation vial, is moistened with water and wiped accross each specified area covering a sampling of 100 cm. The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect phosphorus-32. An appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are to be scrubbed down with soap and water, commercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office.

3-17-89



Bldg. 9, Floor 2, Wing 2

(Final swabb for This Radioactive aux

Counts	Per		Minutes	
--------	-----	--	---------	--

Area	Used Since Last Swabbing?	Isotope	Or Swab	iginal BK	Signature		
1	jes	125 I	23	. 34	44	24 36 48	J. yody
2	415	"	34	44	55		J Jode
3	425	7.1	2.4	36	46		& yodes
4	120	0	26	38	50		J isdu
5	yes	()	37	4.8	59		Jyody
6	yes	17	25	36	47		2 yody
							,
Ŀ						California a la construcción de la	

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Radioisocope Area Survey Report Date:

Area Monicored: Area 2207

:0

Each numbered area and others which may be appropriate at a given time, will e wipe tested as specified. A 5 cm. diameter Mhatman No. 1 filter paper disc, or one cut to fit a scircillation vial, is moistened with water and wiped accross each specified area covering a sampling of 100 cm. The paper is placed in a scintillation vial containing the appropriate liquid scintillation fluid. The samples are counted three times in a liquid scintillation counter for 5 minutes or to 10,000 counts in a configuration such as to detect phosphorus-32. An appropriate blank from a noncontaminated area will be counted and compared to sample areas. A wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate. Contaminated areas are

Signed:

to be scrubbed down with soap and water, conmercial decontamination preparations, 50% ethanol, or other solvents appropriate to the contaminant. The decontaminated areas are recounted and recorded on this report. Retain a copy of this report and send original to the Radiation Control Office.



Bldg. 9, Floor 2, Wing 2

(Final swabb for This Radioactive aux



Area	Used Since Lata Swabbing?	Isotope	Swab Swab	iginal <u>BK</u> Chz	ion <u>Signature</u> MGD		
1	tes	125 I	2.3	34	44	24 36 48	1. Jody
2	410	()	34	44	55) Joden
3	425	/ 1	24	36	46		J yodu
4	·10)	17	26	38	50		J. yody
5	yes	()	37	48	59		9 yody
6	yes	11	25	36	47		2 yo du
1							,
Ŀ		Constant and the second second					
9					Le normalité d'Alant Canadan Gray daran		

Ai_ - D

Audioisotope Area Survey Report

Lach numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm. diameter Whatman No. 1 filter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times ' in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below. A the background count rate. Any area found to be contaminated is decentaminated by an approved procedure, and that procedure is described in detail on the back of in the table below.

Duro May 2, 1974



Lab area 2207

Counts Per " Minutes Used Since Lest A. CO Swebbing ? sotope After Decontamination Original Swab SKGD Swab UNGI 101 13 Theore were no since the last Swabbin. ... weard last swabb in this area Radio waste area 240 11

And olnocope Area Survey Report

Each numbered area (see map below) and each additional trea which may be appropriate at a given time is wipe tested weekly. A 9 cm diameter Whatman No. 1 filter paper disc ofstened with 0.9% sodium chloride is wiped acress a representative area. The disc is calded into a 3/4" sized strip which is then rolled and placed into the bottem of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the <u>Gammacord</u> for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wip tested again and the count recorded in the table below.



Date 2/18/77

		3	Counts Per_	41	Minutes		
Area	Used Since Last Swabbing?	Isoto	pe Arg. CP Swab	Mai BKGD	After Decor Swab	tamination <u>BKGD</u>	Signature
1	4.05	125 I	650	3,50			
2	Yes	1	625	1			
3	167		800				
4	155		480				
5	105	\checkmark	410	Y			any, analoguitan analoguitation i tagadaana
6	No	1257	370	¥			
-7							98- m.
8							
V-9							
10						an ang an ang an Ang an Ang a	Norma, provident and a the state of the state

Radioisotope Area Survey Report

Carreo

10 Bar

Date march 2914

Each numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm. diameter Whatman No. 1 filter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of this sheet. The decontaminated area is wipe tested again and the count recorded in the table below.





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Each numbered area, and those others which may be appropriate at a given time, will be wipe tested weekly. A 5 cm. diameter Whatman No. 1 filter paper disc, moistened with 50% ethanol in distilled water, is wiped across a representative area; after drying, a $5/8" \times 1 1/2"$ strip is cut from the center of the disc and placed in a Wheaton vial containing 17 ml of a toluene: PPO: dimethyl POPOP scintillator. The resulting samples are counted three times in a Packard TRI-CARB model 3375 for 5 minutes or to 10,000 counts in a reafiguration such as to detect both ³H and ¹⁴C. An appropriate blank will also be counted, and the wipe test will be defined as negative unless the observed count rate is in excess of three times the background count rate (\underline{AF} , \underline{CPM}).

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	CPM	•	CP	M
Area	Before After ^a	Area	Before	Aftera
1	16.8	8	16.9	
2	14.5	9		
3	30.3	10		
4	14.9	11		
5	15.1	12		
6	17.7	13		:
7	16.9	14		
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ARL - F-H

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Radioisotope Area Survey Report

Date JULY 7 1970

Each numbered area (see map below) and each additional area which may be appropriate at a given time is wipe tested weekly. A 9 cm. diameter Whatman No. 1 filter paper disc moistened with 0.9% sodium chloride is wiped across a representative area. The disc is folded into a 3/4" sized strip which is then rolled and placed into the bottom of a Packard gamma counting tube. Each such tube is counted three times in a gamma counting instrument such as the Auto-Gamma Spectrometer or the Gammacord for a minimum of four minutes and the count recorded in the table below. A wipe test is defined as negative unless the observed count rate is more than three times the background count rate. Any area found to be contaminated is decontaminated by an approved procedure, and that procedure is described in detail on the back of The decontaminated area is wipe tested again and the count recorded this shoot. in the table below.



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(5-1996)	LI	CENSE F	EE REQU	IREMENTS		ATTN: SHIRI U.S. Nuclear F License Fee a P. O. Box 954 St. Louis, MO	LEY CRUTCH Regulatory Cond Accounts 574 63195-4514	IFIELD (301) 415-6097 ommission Receivable Branch
	BAYER CORPO ATTN: SHANNO 1884 MILES AVI P.O. BOX 70 ELKHART, IN 4	RATION ON GLEAS ENUE 66515-0070	SON, PH.D.,	RSO		NEW LIC RENEWA AMENDA REQUESTED D LICENSE NUME CONTROL NUM	TYPE OF AN ENSE AL OF LICEN MENT TO LINATE 08/04/19 BER 13-02249 IBER 30429	CTION YSE CENSE 298 2-01
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This form was designed using InForms

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Shannon Gleason, F	Ph.D., RADIATION	N SAFETY OFFICER	Bayer Corp. 219-262-7574	

SUBJECT

amendment request dated August 4, 1998, to decommission certain building.

SUMMARY

I spoke to Shannon concerning her request to decommission certain buildings. I explain what would be needed to authorized certain buildings for unrestricted use. Since 2 buildings and several labs are involved, I suggested and the licensee agreed that we should void this request and the licensee resubmit the results of the closeout survey in another amendment request. The licensee's 24 month notification stands and will be placed in the licensee's file. The licensee's request dated August 4, 1998, is hereby voided.

This action is certified by _____

James Mullany 8/24/98

ACTION REQUIRED

Response due in 20 days.



UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 801 WARRENVILLE ROAD LISLE, ILLINOIS 60532-4351

August 13, 1998

Shannon Gleason, Ph.D. Radiation Safety Officer Bayer Corporation P. O. Box 40 1884 Miles Avenue Elkhart, IN 46515

SUBJECT: ACKNOWLEDGEMENT OF CORRESPONDENCE (Letter Dated August 4, 1998)

Dear Licensee:

In response to your request, we have completed the initial processing, which is an administrative review of your application for a(n):

_ New License X Amendment _ Renewal

_ Termination ____ Auth User (Amendment not required)

_ Other_

Administrative deficiencies were identified during this initial review as outlined below. However, it should be noted that a technical review may identify additional omissions in the submitted information.

It appears that your request is routine (see 1-3 below as, applicable).

Incomplete information is as follows: In order for us to complete your request the required fee is necessary. Please contact our License Fee & Debt Collection Branch, located in our headquarters office, as referenced below.

- 1. <u>New and amendment</u> actions are normally completed within 90 days, unless we find major deficiencies, or policy issues requiring central program office assistance. You are required to provide your taxpayer identification number to our Fees Department. Please fill out the enclosed NRC Form 531.
- 2. <u>Renewal</u> actions are normally completed within 180 days, however under timely filing (before expiration) you may continue to operate under your existing license.
- 3. <u>Termination</u> actions are normally completed within 90 days, unless confirmatory surveys following decontamination/decommissioning activities are involved.

A copy of your correspondence has been forwarded to our Licensing Fee and Debt Collection Branch (301/415-6097) for approval of the fee category and amount, if required.

We will try to complete your request as soon as practicable. Any correspondence about this request should reference the control number. Please direct any questions concerning this request to the Materials Licensing Branch at (630) 829-9887.

Materials Support Branch

Mail Control No. 304297 License No. 13-02249-01