100 INDEPENDENCE MALL WEST, PHILADELPHIA, PA 19106-2399 USA TELEPHONE (215) 592-3000

REPLY TO:
SPRING HOUSE TECHNICAL CENTER
727 NORRISTOWN ROAD
P.O. BOX 904
SPRING HOUSE, PA 19477-0904
(215) 641-7000

ROHM AND HAAS

RECEIVED
REGION 1

'05 APR 28 P1:05

April 26, 2005

L-7

Mr. John Nicholson
Commercial and R&D Branch
Division of Nuclear Materials Safety
US Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Ref: Docket No. 03006021
License No. 37-01665-01
Letter dated January 18, 2005, Thompson to Greenley

Dear Mr. Nicholson:

We ask again for removal of the Philadelphia Plant from our license. We are aware of the current decommissioning requirements, which we recently followed to decommission our Bristol facility, but this is a different case. One ^{14}C synthesis was performed 30 years ago in one of the labs at that facility (Room 260 in building 64). It was a non-volatile, one pot reaction synthesis with 11 mCi of ^{14}C-glucose. The synthesis was only performed in a hood, and within a catch tray. The sample(s) were never placed on a lab bench in the lab itself. The lab was monitored after the synthesis and I am enclosing a page from my monitoring notebook, from 1974, which indicates that the lab was monitored, a small amount of contamination was cleaned up, and the lab was then free of contamination.

The main reason we kept the Plant on our license was that we had several labs there that used ^{63}Ni electron-capture detectors. Those labs moved gradually some time ago and I have a logbook, with a log sheet for each detector, showing the history and wipe tests of all of those detectors (similar to what I provided for the Bristol decommissioning) that I could provide if required.

136973
NMSS/RGNI MATERIALS-002

I recently visited the plant and did some meter monitoring and wipe testing. Even though the former lab is now part of one large office area (now vacated), I was able to see where the lab and hood had been located, and I monitored the ceiling and hood duct chase above the drop ceiling. The duct chase was a square cut-out in the ceiling, now capped off with a metal plate, where the hood duct went through the ceiling to the roof. There are some photos that I took which show the office area and duct chase above the drop ceiling. I also have included a photo of another similar lab still in the process of deconstruction, which shows a typical duct going into the ceiling. The fate of the particular hood that was used is unknown. It was either disposed of as construction waste or had special handling since the benchtop was asbestos composite.

I used a Ludlum 44-116 100 cm^2 thin-window scintillator probe with a Ludlum Model 3 survey meter and a Packard 1900 CA Liquid Scintillation Analyzer for the swipes. I used Parafilm squares for the wipe testing, and counted them directly in vials with the counting fluid. I found no evidence of ^{14}C contamination anywhere in the room. Even though ^{3}H was not used in that lab, I also counted for ^{3}H as well and found nothing. Because of static electricity and dirt in the wipe samples, we generally use any count less than twice background as not significant.

At this point I found no evidence of contamination in the only area where ^{14}C material was used.

Sincerely,

Alan M. Rothman

Alan M. Rothman, Ph.D.
Radiation Safety Officer
Spring House Technical Center
Rohm and Haas Company
Tel: 215-641-7229
FAX: 215-641-7254

Approved By:

David E. Greenley, Ph.D.
Director of Technology Operations
Spring House Technical Center
Rohm and Haas Company

Enclosures:

1. Monitoring Notebook, page 18 and 19, June 1974 to July 1974.
2. Photo showing vacated office area, site of the former lab.
3. Photo showing location of former corridor separating labs (pillar and ceiling joist show location of former wall of lab).
4. Photo showing ceiling hood duct chase (for hood used in synthesis).
5. Photo showing a similar lab that is now vacated.
6. Photo showing hood duct detail in that lab, similar to that for the former lab in Room 260.
7. Meter Monitoring Report of Room 260.
8. Wipe Test Monitoring Report of Room 260.

6/3/74 Monitoring for Contamination :- Room 260 @ Phila Plant in Building 60 where Dr. Ron Fong prepared ^{14}C-4D-310. 10 mCi of ^{14}C-D-Glucose was used.
Water soaked Q-tips for swipes and counted in Aquasol.

Area	cpm
1- hood	20
2- floor shelf under hood	240 *
3- floor in front of hood	45
4- bench top where resin column was	28
5- same	22
6- balance pan (large balance)	31
7- " " (small balance)	21
8- floor in front of bench	26
9- floor aisle between hood & bench	28.3
10- hood wall (left)	32
11- hood wall (rear)	30
12- hood shelf (middle level)	30
13- reaction vessel (necks & exit tube)	10,470 *
14- vacuum valve	126 *

The floor shelf under the hood was contaminated when the waste jar was mistakenly placed there. The vacuum valve was probably contaminated by the glove when the technician operated the valve. The reaction vessel was soaked and rinsed but is obviously still contaminated. The following are rinse counts of the reaction vessel and resin column.

	cpm for 1ml aliquot
column	1570
reaction vessel	3325

Since the glassware was still strongly contaminated it was sent up here for cleaning.

AMR

note: The product was atypical and more work was necessary on it. The glassware was returned rather than cleaned.

6/18/74 Monitoring of Room 260 in Bldg 60 @ Phila. Plant

The 90-310 (C) was atypical and the last steps had to be repeated. After the repeat the lab was again monitored.

#	Area	cpm
1	hood shelf (top)	22
2	hood wall (left)	860 ←
3	hood wall (rear)	29
4	hood shelf (middle)	134
5	hood shelf (floor)	97
6	floor in front of hood	219 ←
7	bench top (rear/column)	131
8	" near sink	307 ←
9	wash bottle	12,128 ←
10	floor (in front of column)	279 ←
11	" (in front of refrig)	54
12	" (sink area)	60
13	chair seat	29
14	valve handle	177 ←
15	heat gun	46
16	balance pan (small)	120 ←
17	balance pan & dial (large)	75
18	sink	62
19	clamps	421 ←
20	oven	51
21	background	21

6/21/74 Repeat Monitoring of Room 260 in Bldg 60 @ Phila.

#	Area	cpm
1	floor in front of bench	30
2	floor " " hood	30
3	floor " " waste can	25
4	floor between hood & bench	22
5	bench top (right)	375 ←
6	bench middle & rear	20
7	hood floor shelf	60
8	hood middle shelf	30
9	hood deck (left)	20
10	" " (right)	20
11	vacuum valve	22
12	hood wall (left upper)	21
13	" " (left lower)	20
14	" " (rear)	20
15	" " (right)	20
16	shelf behind column	21
17	towel holder	20
18	drawer fronts	27
19	sink area	25
20	hood deck	18

Ron was notified on item #5. He will clean the area & send up all the wipings in a paint can.

6/25/74

1	right end of bench top	160 ←
2	under column	55
3	drawer handle	235 ←
4	front edge of bench	45

Once again Ron was notified on items #1 and #5.

7/2/74

1	handle	21
2	right edge of bench	25
3	right side of bench	20
4	handle	18

Now all is o.k.

AMR

Phila Plant Building 60 Room 260

Ceiling and Duct Chase Over Former Hood

SURVEY METER MONITORING FOR CONTAMINATION

Area or Place Monitored: Room 260 Bldg 60

A. Meter:

Meter Used (S/N) Ludlum Model 3 (72440) w/ 44-116 probe

Expiration Date 9/15/05

Check Source Reading 5500 cpm **Theor. Reading** ~ 5,000 cpm

Background Reading (units) 350 cpm

B. Items Surveyed:	**Result:**
#1 Hood vent chase, ceiling around hole, pillar at top near hole, ceiling joist	ok (BKG)
#2 Hood vent chase, ceiling around hole, column at new opening and ceiling joist	ok (BKG)
Floor of hood area	ok (BKG)
columns below drop ceiling	ok
doorway	ok
Hallway floor and walls	ok
spot checks on walls and floor	ok

Survey Performed By Alan M. Rothman

Date 4/15/05

WIPE TEST MONITORING FOR CONTAMINATION

Area or Place Monitored: Room 260 Bldg 60

Items Surveyed:

Wipe #	Item tested
1	control
2-5	#1 duct chase opening (4 sides)
6	ceiling around opening
7	ceiling joist side
8, 9	column (uncovered portion near ceiling)
10	joist lower surface
11	column (covered portion)
12	rug around column
13-16	rug in former lab area
17	doorway
18	floor in hallway
19	wall in hallway
20	#2 pillar (covered portion)
21-24	#2 duct chase opening
25	pillar above drop ceiling
26	joist
27, 28	around opening on ceiling

Survey Performed By Alan M. Rothman

Date 4/15/05

Monitoring Report for Wipe Testing

Location:	**Philadelphia Plant Building 60 Room 260**		
Date:	4/15/2005	**Done By:**	Alan M. Rothman
Type:	Dry wipe with Parafilm Squares		

Counter:	Packard Tri-Carb 1900 CA	**Cocktail:**	ReadySafe
Count:	3 x 5 min 10 deg C		

		Tritium channel	
vial #	**wipe ID**	**dpm**	**uCi**
1	background control	5	---
2	Duct chase opening surface	0	0
3	Duct chase opening surface	0	0
4	Duct chase opening surface	0	0
5	Duct chase opening surface	0	0
6	Ceiling around opening	0	0
7	Ceiling joist side	0	0
8	Pillar (uncovered portion near ceiling)	0	0
9	Pillar (uncovered portion near ceiling)	6	0
10	Joist lower surface	4	0
11	Pillar (covered portion)	2	0
12	rug around column	0	0
13	rug in former lab area	0	0
14	rug in former lab area	0	0
15	rug in former lab area	0	0
16	rug in former lab area	0	0
17	Doorway	1	0
18	Floor in hallway	0	0
19	wall in hallway	1	0
20	#2 pillar (covered portion)	4	0
21	#2 duct chase opening	0	0
22	#2 duct chase opening	0	0
23	#2 duct chase opening	0	0
24	#2 duct chase opening	0	0
25	#2 Pillar above drop ceiling	0	0
26	#2 Joist	0	0
27	Around opening #2	0	0
28	Around opening #2	2	0
30	14C internal spike (27500 dpm)	N/A	N/A
31	14C internal spike (27500 dpm)	N/A	N/A
32	sealed standard	N/A	N/A

Signature: Alan Rothman Date: 4/19/05

Protocol #:13 Name:Bldg 60 Rm 260 18-Apr-2005 10:48
Region A: LL-UL= 0.0-12.0 Lcr= 0 Bkg= 0.00 %2 Sigma=0.43
Region B: LL-UL=12.0-156. Lcr= 0 Bkg= 0.00 %2 Sigma=0.43
Region C: LL-UL= 0.0- 0.0 Lcr= 0 Bkg= 0.00 %2 Sigma=0.00
Time = 5.00 QIP = tSIE/AEC ES Terminator = Count
Conventional DPM
Nuclide 1 = 283300 Nuclide 2 = 125100

S#	TIME	CPMA	CPMB	SIS	DPM1	DPM2	tSIE	FLAG
1	10.00	5.12	13.18	92.616			693.	B
1	10.00	4.95	12.19	89.082			694.	B
1	10.00	4.18	12.52	97.444			692.	B
	10.00	4.75	12.63	93.047			693.	AB
2	5.00	0.00	0.37	0.000	0.00	0.54	144.	
2	5.00	0.00	1.83	0.000	0.00	2.63	143.	
2	5.00	0.00	1.41	0.000	0.00	2.03	144.	
	5.00	0.00	1.20	0.000	0.00	1.73	144.	A
3	5.00	0.00	0.00	0.000	0.00	0.00	216.	
3	5.00	0.00	0.63	0.000	0.00	0.84	216.	
3	5.00	0.00	0.00	0.000	0.00	0.00	217.	
	5.00	0.00	0.21	0.000	0.00	0.28	216.	A
4	5.00	0.00	5.68	0.000	0.00	7.40	263.	
4	5.00	0.00	0.00	0.000	0.00	0.00	263.	
4	5.00	0.00	0.00	0.000	0.00	0.00	261.	
	5.00	0.00	1.89	0.000	0.00	2.47	262.	A
5	5.00	0.00	0.00	0.000	0.00	0.00	326.	
5	5.00	0.00	0.00	0.000	0.00	0.00	327.	
5	5.00	0.00	3.59	0.000	0.00	4.59	328.	
	5.00	0.00	1.20	0.000	0.00	1.53	327.	A
6	5.00	0.00	0.00	0.000	0.00	0.00	441.	
6	5.00	0.00	0.00	0.000	0.00	0.00	443.	
6	5.00	0.00	0.00	0.000	0.00	0.00	441.	
	5.00	0.00	0.00	0.000	0.00	0.00	442.	A
7	5.00	0.12	0.00	0.000	0.38	0.00	351.	
7	5.00	0.00	4.41	0.000	0.00	5.61	347.	
7	5.00	0.00	0.00	0.000	0.00	0.00	347.	
	5.00	0.04	1.47	0.000	0.13	1.87	349.	A
8	5.00	0.00	0.00	0.000	0.00	0.00	469.	
8	5.00	0.00	3.59	0.000	0.00	4.45	470.	
8	5.00	0.00	0.84	0.000	0.00	1.04	472.	
	5.00	0.00	1.48	0.000	0.00	1.83	470.	A
9	5.00	4.88	16.10	41.268	6.19	19.28	491.	
9	5.00	3.86	13.96	45.031	4.48	16.76	491.	
9	5.00	4.86	10.76	32.302	7.99	12.69	491.	
	5.00	4.53	13.61	39.534	6.22	16.25	491.	A
10	5.00	2.45	5.97	29.340	3.60	7.05	542.	
10	5.00	2.05	9.97	38.166	1.40	12.01	542.	
10	5.00	4.42	9.74	41.841	6.85	11.44	540.	
	5.00	2.97	8.56	36.449	3.95	10.16	541.	A
11	5.00	1.66	3.76	44.523	2.40	4.41	598.	
11	5.00	0.27	2.90	18.864	0.00	3.51	597.	
11	5.00	1.67	2.35	46.391	2.83	2.69	599.	
	5.00	1.20	3.00	36.593	1.74	3.53	598.	A
12	5.00	0.00	5.38	0.000	0.00	6.71	436.	
12	5.00	1.03	3.79	0.000	1.26	4.60	436.	
12	5.00	0.00	3.80	38.683	0.00	4.73	436.	
	5.00	0.34	4.32	12.894	0.42	5.35	436.	A

S#	TIME	CPMA	CPMB	SIS	DPM1	DPM2	tSIE	FLAG
13	5.00	0.00	2.56	60.706	0.00	3.14	572.	
13	5.00	0.48	3.54	0.000	0.00	4.28	572.	
13	5.00	0.00	1.26	184.65	0.00	1.54	571.	
	5.00	0.16	2.45	81.785	0.00	2.98	572.	A
14	5.00	0.00	0.00	0.000	0.00	0.00	608.	
14	5.00	0.00	0.00	0.000	0.00	0.00	614.	
14	5.00	0.79	1.23	71.467	1.29	1.41	610.	
	5.00	0.26	0.41	23.822	0.43	0.47	611.	A
15	5.00	0.00	1.89	0.000	0.00	2.32	512.	
15	5.00	0.00	0.00	0.000	0.00	0.00	514.	
15	5.00	0.00	2.25	36.543	0.00	2.77	509.	
	5.00	0.00	1.38	12.181	0.00	1.70	512.	A
16	5.00	0.17	1.85	0.000	0.00	2.26	470.	
16	5.00	0.00	0.66	0.000	0.00	0.82	466.	
16	5.00	0.00	1.59	0.000	0.00	1.97	468.	
	5.00	0.06	1.37	0.000	0.00	1.68	468.	A
17	5.00	0.63	0.39	0.000	1.22	0.40	608.	
17	5.00	0.10	0.00	0.000	0.21	0.00	606.	
17	5.00	0.89	0.00	0.000	1.87	0.00	608.	
	5.00	0.54	0.13	0.000	1.10	0.13	607.	A
18	5.00	0.00	3.61	0.000	0.00	4.52	426.	
18	5.00	0.00	2.22	0.000	0.00	2.77	425.	
18	5.00	0.00	1.22	0.000	0.00	1.53	424.	
	5.00	0.00	2.35	0.000	0.00	2.94	425.	A
19	5.00	1.59	0.00	0.000	3.45	0.00	578.	
19	5.00	0.00	2.42	0.000	0.00	2.96	581.	
19	5.00	0.19	1.25	0.000	0.01	1.51	578.	
	5.00	0.59	1.22	0.000	1.16	1.49	579.	A
20	5.00	2.08	0.54	18.857	4.28	0.42	598.	
20	5.00	1.65	0.17	4.236	3.48	0.02	594.	
20	5.00	1.46	0.00	0.000	3.12	0.00	597.	
	5.00	1.73	0.24	7.698	3.62	0.15	596.	A
21	5.00	0.82	3.40	29.489	0.77	4.08	522.	
21	5.00	0.00	0.00	0.000	0.00	0.00	521.	
21	5.00	0.00	3.45	0.000	0.00	4.25	520.	
	5.00	0.27	2.28	9.830	0.26	2.78	521.	A
22	5.00	0.00	0.00	0.000	0.00	0.00	504.	
22	5.00	0.00	3.28	0.000	0.00	4.04	502.	
22	5.00	0.00	0.00	0.000	0.00	0.00	501.	
	5.00	0.00	1.09	0.000	0.00	1.35	502.	A
23	5.00	0.00	0.00	0.000	0.00	0.00	477.	
23	5.00	0.00	2.42	0.000	0.00	3.00	476.	
23	5.00	0.00	2.69	51.581	0.00	3.33	474.	
	5.00	0.00	1.70	17.194	0.00	2.11	476.	A
24	5.00	0.00	0.57	0.000	0.00	0.71	481.	
24	5.00	0.00	3.44	0.000	0.00	4.25	481.	
24	5.00	0.00	2.17	0.000	0.00	2.68	482.	
	5.00	0.00	2.06	0.000	0.00	2.55	481.	A
25	5.00	0.00	0.00	0.000	0.00	0.00	373.	
25	5.00	0.00	1.70	0.000	0.00	2.16	371.	
25	5.00	0.00	3.62	0.000	0.00	4.58	369.	
	5.00	0.00	1.77	0.000	0.00	2.25	371.	A
26	5.00	0.48	4.13	0.000	0.00	5.15	389.	
26	5.00	0.00	0.00	0.000	0.00	0.00	387.	
26	5.00	0.00	1.59	0.000	0.00	2.01	386.	
	5.00	0.16	1.91	0.000	0.00	2.39	387.	A

S#	TIME	CPMA	CPMB	SIS	DPM1	DPM2	tSIE	FLAG
27	5.00	0.17	0.65	0.000	0.18	0.79	468.	
27	5.00	0.00	0.00	0.000	0.00	0.00	469.	
27	5.00	0.29	0.33	0.000	0.61	0.37	469.	
	5.00	0.15	0.33	0.000	0.26	0.39	469.	A
28	5.00	0.25	0.00	43.915	0.49	0.00	700.	
28	5.00	1.32	0.50	75.233	2.46	0.47	698.	
28	5.00	1.22	0.00	17.401	2.41	0.00	702.	
	5.00	0.93	0.17	45.517	1.78	0.16	700.	A
(1 missing vial)								
30	5.00	2951.54	22134.1	98.310	0.00	26766.1	581.	
30	5.00	2922.53	22121.6	98.365	0.00	26752.8	581.	
30	5.00	2937.27	22148.3	98.327	0.00	26781.3	583.	
	5.00	2937.12	22134.7	98.334	0.00	26766.7	582.	A
31	5.00	2991.17	22853.0	96.494	0.00	27669.8	565.	
31	5.00	3002.05	22615.4	96.393	0.00	27380.6	563.	
31	5.00	2964.50	22801.9	96.646	0.00	27608.3	566.	
	5.00	2985.91	22756.8	96.511	0.00	27553.9	[illegible]	
32	2.21	14291.1	[illegible]					
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

A - 27,500 dpm ^{14}C spiked standard

- 27,500 dpm ^{14}C spiked standard

- 117,700 dpm ^{14}C sealed standard

SYSTEM NORMALIZED
C14 IPA DATA PROCESSED - 18-Apr-2005 09:36
C14 Eff (0-156 keV) = 95.20 %
H3 IPA DATA PROCESSED - 18-Apr-2005 09:37
H3 Eff (0-18.6 keV) = 63.69 %
BKG IPA DATA PROCESSED - 18-Apr-2005 10:37
Bkg (0-18.6 keV) = 15.60 cpm
Bkg (0-156 keV) = 22.43 cpm
C14 E^2/B (1-156 keV) = 530.49
H3 E^2/B (1-18.6 keV) = 258.39

This is to acknowledge the receipt of your letter/application dated

4/26/2005, and to inform you that the initial processing which includes an administrative review has been performed.

Amendment 37-01665-01

[X] There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

[ ] Please provide to this office within 30 days of your receipt of this card

_____.

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 136973.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

(FOR LFMS USE)
INFORMATION FROM LTS

Program Code: 03610
Status Code: 0
Fee Category: 3L
Exp. Date: 20150131
Fee Comments: _____
Decom Fin Assur Reqd: Y

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
Applicant/Licensee: ROHM & HAAS CO.
Received Date: 20050428
Docket No: 3006021
Control No.: 136973
License No.: 37-01665-01
Action Type: Amendment

2. FEE ATTACHED
Amount: /
Check No.: /

3. COMMENTS

Signed Rebecca Jurad
Date 5/10/2005

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:
Amendment _____
Renewal _____
License _____

3. OTHER _____
_____

Signed _____
Date _____