

RADIOLOGY ASSOCIATES  
1801 Harvest Lane  
Bloomfield Hills, Mi 48302

October 18, 2012

United States Nuclear Regulatory Commission  
Region III, Materials Licensing  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

**ATTN: Colleen Casey**

**RE: Amendment to NRC License No. 21-16754-01**

Dear Sir/Madam:

The purpose of this letter is to remove a location of use from our current NRC license. We would like to request concurrent and expedited processing of this license amendment with the NRC license application for Opdyke Diagnostic Center listing this facility as a location of use. The reason for this request is to prevent any disruption of clinical practice or patient care. In addition, we would like to make this amendment effective on December, 1, 2012. Please find the enclosed information pertaining to both transactions.

**Item #1**

Please remove the following location of use from our NRC license:

**719 S. Opdyke Road  
Auburn Hills, MI**

All equipment and radioactive material including the sealed sources will remain at the above location of use and will be transferred to Opdyke Diagnostic Center's NRC license pending the NRC's approval.

We have enclosed the results of daily area surveys and weekly contamination surveys for the past month for this facility. A current copy of the leak test results for the sealed sources used at our facility is enclosed for your review.

' RECEIVED OCT 22 2012

Thank you for your cooperation. If you have any questions or require additional information, please contact our physics consultant, Sharon Updike at 734-662-3197.

Respectfully Yours,

John Bell

Executive Management  
Radiology Associates, P.C.



## Sealed Source Leak Test

Licensee: Updyke Diagnostic Center, PLC

Date: 08/28/12

Performed by: Sharon Updike

Nuclide	Type	Calibration		Location	M/N	S/N
		Activity	Date			
Cs-137	Vial	216 uCi	02/14/97	Hot Lab	NES356	S356034-063
		Current Activity: 150.84uCi				
Ba-133	Vial	255.4 uCi	08/01/03	Hot Lab	IPL	986-45-9
		Current Activity: 142.14uCi				
Co-57	Flood	10 mCi	01/01/11	Hot Lab	NES392	1473-167
		Current Activity: 2.127mCi				

Comment: The sources listed above were leak tested using a dry wipe technique and were found to have less than 0.005 uCi removable activity. The following Minimum Detectable Activities are based upon a background at the indicated value. Background was at or below these levels when the above tests were completed.

Well Counter: Captus 3000

Nuclide	MDA	Background
Cs-137	$2.0 \times 10^{-4}$ uCi	145 counts/1 min
Ba-133	$8.8 \times 10^{-5}$ uCi	204 counts/1 min
Co-57	$1.7 \times 10^{-5}$ uCi	53 counts/1 min

RADIATION SAFETY OFFICER:

# Daily Area Survey



MONTH: October

YEAR: 2012

INSTRUMENT: GM Survey Meter

Make: Ludlum Model: 14C

Serial # 194297

Check source value: 0.95 mR/hr

Enter readings in mR/h

DAY	OK	BKG.	1	2	3	4	5	6	7	8	9	10	Name
		Trigger values:	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
1													
2	0.95	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02			R.3oksa
3	0.95	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02			R.3oksa
4	0.95	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01			R.3oksa
5	0.95	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03			R.3oksa
6													
7													
8													
9	0.95	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01			R.3oksa
10	0.95	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.03			R.3oksa
11	0.95	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02			R.3oksa
12													
13	0.95	0.01	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03			R.3oksa
14													
15	0.95	0.01	0.01	0.02	0.02	0.03	0.02	0.01	0.03	0.02			Brian
16	0.95	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02			R.3oksa
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													

# Daily Area Survey



MONTH: September

YEAR: 2012

INSTRUMENT: GM Survey Meter

Make: Iodilum

Model: 14C

Serial # 194297

Check source value: 0.95 mR/hr

Enter readings in mR/h

DAY	OK	BKG.	1	2	3	4	5	6	7	8	9	10	Name
	Trigger values:		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
1													
2													
3													
4	0.95	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	R30ksa
5	0.95	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.02	R.Boksa
6													
7	0.95	0.02	0.02	0.02	0.03	0.03	0.02	0.03	0.02	0.03			R30ksa
8													
9													
10													
11	0.95	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	R30ksa
	0.95	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.03			R30ksa
13	0.95	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	R30ksa
14	0.95	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	R30ksa
15													
16													
17	0.95	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.01			Bmeas
18	0.95	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03			R30ksa
19	0.95	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03			R30ksa
20	0.95	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	R30ksa
21	0.95	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.03			R30ksa
22													
23													
24	0.95	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.02	0.03			Bmeas
25	0.95	0.02	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.03			R30ksa
26	0.95	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02			R30ksa
27	0.95	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01			R30ksa
28	0.95	0.02	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.03			R30ksa
	0.95	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02			R30ksa
30													
31													

**Nuclear Medicine**  
**Weekly Wipe Records**

Window Setting:

Efficiency Factor (E.F) of Instrument = 2 DPM/CPM

Trigger Level (DPM): 1000 dpm/100 sq cm

To get Disintegrations Per Minute: (CPM - BKG) x E.F. = DPM

Background:	1)	2)	AVERAGE BKG:		
Swipe	1	2	3	4	5
net CPM	—	—	—	—	—
net DPM	62	62	62	62	64
Swipe	6	7	8	9	10
net CPM	—	—	—	—	—
net DPM	63	63	64	—	—

Signature of tester: R. Boksa

DATE: 9-28-12

Background:	1)	2)	AVERAGE BKG:		
Swipe	1	2	3	4	5
net CPM	—	—	—	—	—
net DPM	60	60	60	60	60
Swipe	6	7	8	9	10
net CPM	—	—	—	—	—
net DPM	60	60	60	—	—

Signature of tester: R. Boksa

DATE: 10-5-12

Background:	1)	2)	AVERAGE BKG:		
Swipe	1	2	3	4	5
net CPM	—	—	—	—	—
net DPM	6	6	6	6	6
Swipe	6	7	8	9	10
net CPM	—	—	—	—	—
net DPM	6	6	6	—	—

Signature of tester: R. Boksa

DATE: 10-11-12

Background:	1)	2)	AVERAGE BKG:		
Swipe	1	2	3	4	5
net CPM	—	—	—	—	—
net DPM	—	—	—	—	—
Swipe	6	7	8	9	10
net CPM	—	—	—	—	—
net DPM	—	—	—	—	—

Signature of tester:

DATE:

**Nuclear Medicine**  
**Weekly Wipe Records**

Window Setting:

Efficiency Factor (E.F) of Instrument = 2 DPM/CPM

Trigger Level (DPM): 1000 dpm/100 sq cm

To get Disintegrations Per Minute: (CPM - BKG) x E.F. = DPM

Background:	1)	2)	AVERAGE BKG:		
Swipe	1	2	3	4	5
net CPM	—	—	—	—	—
net DPM	60	60	60	60	64
Swipe	6	7	8	9	10
net CPM	—	—	—	—	—
net DPM	64	64	60	X	X

Signature of tester: R. Boksa DATE: 8.31.12

Background:	1)	2)	AVERAGE BKG:		
Swipe	1	2	3	4	5
net CPM	—	—	—	—	—
net DPM	Ø	Ø	Ø	Ø	Ø
Swipe	6	7	8	9	10
net CPM	—	—	—	X	X
net DPM	Ø	Ø	Ø	X	X

Signature of tester: R. Boksa DATE: 9.7.12

Background:	1)	2)	AVERAGE BKG:		
Swipe	1	2	3	4	5
net CPM	—	—	—	—	—
net DPM	63	63	63	63	Ø
Swipe	6	7	8	9	10
net CPM	—	—	—	X	X
net DPM	Ø	Ø	64	X	X

Signature of tester: R. Boksa DATE: 9.14.12

Background:	1)	2)	AVERAGE BKG:		
Swipe	1	2	3	4	5
net CPM	—	—	—	—	—
net DPM	Ø	Ø	Ø	Ø	Ø
Swipe	6	7	8	9	10
net CPM	—	—	—	X	X
net DPM	Ø	Ø	Ø	X	X

Signature of tester: R. Boksa DATE: 9.21.12