

BUSINESS CENTER 2722 MERRILEE DRIVE, SUITE 230 FAIRFAX, VA 22031 703-698-4444 FAX 703-698-2176

WOODBURN DIAGNOSTIC CENTER/ NUCLEAR MEDICINE IMAGING CENTER 3299 WOODBURN RD., SUITE 110 ANNANDALE, VA 22003 703-849-9050 FAX 703-698-4491

YORKTOWN IMAGING CENTER 8316 ARLINGTON BLVD., SUITE 206 FAIRFAX, VA 22031 703-698-8550 FAX 703-641-5709

PROSPERITY IMAGING CENTER 8503 ARLINGTON BLVD., LL-SUITE 100 FAIRFAX, VA 22031 703-698-9600 FAX 703-698-5609

THE ULTRASOUND CENTER 8503 ARLINGTON BLVD., LL-SUITE 100 FAIRFAX, VA 22031 703-698-4498 FAX 703-280-1566

THE BREAST DIAGNOSTIC CENTER 8318 ARLINGTON BLVD., SUITE 200 FAIRFAX, VA 22031 703-698-4455 FAX 703-205-9884

FAIRFAX MRI CENTER* 8318 ARLINGTON BLVD., SUITE 100 FAIRFAX, VA 22031 703-204-8333 FAX 703-204-3744

VIENNA IMAGING CENTER 115 PARK STREET, SE. SUITE 300 VIENNA, VA 22180 703-698-4456 FAX 703-242-4474

SPRINGFIELD IMAGING CENTER 5510 Alma Lane, Suite 100 Springfield, VA 22151 703-698-4485 FAX 703-750-0302

RESTON/HERNDON IMAGING CENTER 100 ELDEN STREET, SUITE 16 HERNDON, VA 20170 703-481-9400 FAX 703-481-9408

RESTON/HERNDON BREAST IMAGING CENTER 106 ELDEN STREET, SUITE 16 HERNDON, VA 20170 703-481-9400 FAX 703-796-1103

CENTREVILLE/CLIFTON IMAGING CENTER 6211 CENTREVILLE RD, SUITE 400 CENTREVILLE, VA 20121 703-204-4411 FAX 703-961-8318

WESTERN LOUDOUN IMAGING CENTER 224 Cornwall Street, NW Leesburg, VA 20176 703-737-7550 FAX 703-737-7555

FAIRFAX RADIOLOGICAL CONSULTANTS, P.C. RADIOLOGISTS TO INOVA FAIRFAX HOSPITAL AND LOUDOUN HOSPITAL CENTER

July 10, 2006

Br.1

US Nuclear Regulatory Commission. Region 1 Licensing Assistance Team Division of Nuclear Materials Safety 475 Allendale Road King of Prussia. Pa.19406

Sec

RE: AMENDMENT TO LICENSE 45-25031-01

To Whom It May Concern:

Fairfax Radiological Consultants, PC is requesting the removal (decommissioning) from our license the following site located at:

3299 Woodburn Road. Suite 110 Annandale, Va. 22031

The site located at 8503 Arlington Boulevard, Suite LL100 Fairfax.Va is to *remain on the license*.

Attached is the Physicist's Decommissioning Report and NRC form 313. If there are any questions regarding this application, please contact Linda Tolerico, Sr. Director of Patient Services at 703-698-4444. Thank you for your assistance with this matter.

Sincerely,

Brigid Anne Castro. MD Radiation Safety Officer



FAIRFAX MRI CENTER IS OWNED BY INOVA FAIRFAX HOSPITAL MANAGEMENT AND PROFESSIONAL SERVICES ARE PROVIDED BY FAIRFAX RADIOLOGICAL CONSULTANTS. P.C. WWW.fairfaxradiology.com

NRC FORM 313 U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0120 EXPIRES: 10/31/2008 Estimated burden per response to comply with this mandatory collection request: 4.4
(10-2005) 10 CFR 30, 32, 33.	hours. Submittal of the application is necessary to determine that the applicant is unalified and that adoptate procedures exist to protect the public health and safety
34, 35, 36, 39, and 40	Send comments regarding burden estimate to the Records and FOIA/Privacy Services
	or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of
APPLICATION FOR MATERIAL LICENSE	and Budget. Washington, DC 20503. If a means used to impose an information
	collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information
	collection.
INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GU SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO	IDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. THE NRC OFFICE SPECIFIED BELOW.
APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:	IF YOU ARE LOCATED IN:
DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS U.S. NUCLEAR REGULATORY COMMISSION	ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:
WASHINGTON, DC 20555-0001	MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION III 2443 WARRENVILLE ROAD, SUITE 210
ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:	LISLE. IL 60532-4352
IF YOU ARE LOCATED IN:	
ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA,	ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,
KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:	LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:
LICENSING ASSISTANCE TEAM	NUCLEAR MATERIALS LICENSING BRANCH
DIVISION OF NUCLEAR MATERIALS SAFETY U.S. NUCLEAR REGULATORY COMMISSION, REGION I	U.S. NUCLEAR REGULATORY COMMISSION, REGION IV 611 RYAN PLAZA DRIVE. SUITE 400
475 ALLENDALE ROAD KING OF PRUSSIA. PA 19406-1415	ARLINGTON, TX 76011-4005
PERSONS LOCATED IN AGREEMENT-STATES SEND APPLICATIONS TO THE U.S. NUCLEA MATERIAL IN STATES SUBJECT TO U.S.NUCLEAR REGULATORY COMMISSION JURISDIC	R REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED
1. THIS IS AN APPLICATION FOR (Check appropriate item)	2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)
A. NEW LICENSE	Fairfax Radiological Consultants, PC
B. AMENDMENT TO LICENSE NUMBER 45-25031-01	Fairfax, Va. 22031
C. RENEWAL OF LICENSE NUMBER	
3 ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED	4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION
Decomissioning of site located at :	Brigid Anno Costro MD BSO
3299 Woodburn Road, Suite 110, Annandale, Va. 22003	Bilgid Anne Casilo, MD, RSO
The site located at 8503 Alington Rivd. Suite 11,100	TELEPHONE NUMBER
Fairfax, Va 22031 is to remain IN USE.	(703) 698-4444
SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMA	TION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.
 RADIOACTIVE MATERIAL Element and mass number: b. chemical and/or physical form; and c. maiximum amount which will be possessed at any one time. 	6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.
7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR	
9. FACILITIES AND EQUIPMENT.	10. RADIATION SAFETY PROGRAM.
11. WASTE MANAGEMENT.	12. LICENSE FEES (See 10 CFR 170 and Section 170.31) FEE CATEGORY AMOUNT FINCL DSFD S
13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THA	T ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING
THE APPLICATION ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.	THE APPLICANT, NAMED IN ITEM 2. CERTIFY THAT THIS APPLICATION IS PREPARED IN 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTANED HEREIN IS TRUE AND
WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A C ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN	RIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO
CERTIFYING OFFICER TYPED/PRINTED NAME AND TITLE	SIGNATURE DATE
<u> </u>	ma como MD + 110/06
	USE ONLY KNUMBER COMMENTS
S	
APPROVED BY DATE	

NRC	FORM	313	(10-2005)

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REPORT ON FREE RELEASE OF FRC NUCLEAR MEDICINE CLINIC SPACES

22 June 2006

- Survey Date: 19 May 2006
- Location: Fairfax Radiological Consultants, INC 3299 Woodburn Road Suite 110 Annandale, Virginia 22003
- Licenses: NRC License # NRC-45-25031-01 VA License # VA-142-01
- Surveyor: Laurence F. Parr, MS, DABR
- Instruments: BICRON 200 GM survey instrument with a thin window pancake CM probe. Nuclear Associates Deluxe Wipe Test Counter. Captus 3000 Well Counter with 2" NaI well crystal.

Isotopes: Tc-99m Ga-67 Tl-201 In-111 I-123 I-131

Procedure: The clinic spaces were divided into a grid pattern based on the 12"x12" tiles of the floor. The camera rooms, support areas, and waiting area etc. used a grid of three nine tiles or 36"x36" and for the radiopharmacy, dosing room and bathroom the gird was 4 tiles or 24"x24." The walls of all rooms were also checked. Each room was given a number and each grid location also given a sequential number with the specific location being identified by the room # and grid number (eg. 2-5 is room two grid location 5).

The initial survey of the clinic spaces was conducted using a thin window GM pancake survey meter to determine whether any significant contamination (fixed or lose) was present. This was done by passing the GM probe over each of the grid squares at a distance of about 1" from the surface. On the walls the probe was slowly moved over the wall from chest height to the floor in a sweeping back and forth pattern. Prior to use the survey instrument was verified to be within calibration and checked for operation by measuring the attached 1 uCi Cs-137 and verifying that it read as indicated on the calibration sticker (6.5 mr/hr). At the same time the cpm indicated by the unit was measured in order to estimate the sensitivity of the survey instrument. The check source gave a reading of 6000 cpm for 2.2×10^3 kdpm or about 3 cpm / kdpm. The general area background for

the instrument was 30 cpm with a standard deviation of \sim 6 cpm. Thus, based on Cs-137, to record a count rate at least three standard deviations greater than background, \sim 6000 dpm would have to be present. Any areas of greater than 30 cpm were noted the survey form for special attention when looking for removable contamination.

The removable contamination was evaluated by wiping the designated areas with Rad-Wipe® Smears and with initial counting in a GM detector based Wipe Test Counter to determine if there were any obvious areas of contamination. The process used was to wipe the area in a four pass back and forth "S" pattern which, assuming the contact area on the wipe paper was about 1 cm², gave a wipe area of \sim 300 cm² for the 36"x36" grid and \sim 200 cm² for the 24"x24" grid. The counter was calibrated against a 0.075 uCi Cs-137 source and a 0.1 uCi Tc-99m source (made by decaying and diluting a known source and extracting a calculated volume using a micro syringe for accuracy). To determine the sensitivity of the system a 20 minute background count time was used to improve statistics of the background cpm and reduce the MDA level. Over a series of 20 minutes counts the background count rate per minute was stable between 9.9 and 10.9 cpm with an average of 10.68 cpm and a standard deviation of 0.73 cpm. Any net measurement greater than 2.16 cpm (three standard deviations) was considered significant (>99% level) and represents an activity of 0.0002 µCi based on Tc-99m. The system is capable of measuring less than 1000 dpm accurately.

The wipe samples were counted in groups of five. If the group net count rate was greater than $1\frac{1}{2}$ times the group count rate standard deviation there is ~98% confidence that the recorded count rate is in fact greater than "zero." In this situation each of the five wipes was measured individually to determine if any single swipe as responsible.

The swipes were counted again a few days later in a high sensitivity NaI well counting system. Again the samples were counted in batches and if the batch count rate was greater than $1\frac{1}{2}$ the standard deviation of the count rate, then the individual swipes were counted.

Results: Quarterly review of the nuclear medicine program at FRC Woodburn over the years has shown no significant contaminating events. The weekly wipe surveys and area surveys were always below limits though on some occasions the locally established action limits were exceeded. In this case the area was cleaned and retested always bring the results to below action levels.

The area radiation survey using the BICRON 200 survey meter showed not areas with count rates greater than background. Based on the general calibration of the survey instrument, this implied that no areas of activity greater than 6000 dpm were likely.

The "PRELIMINARY COUNTING RESULTS" data sheet indicated all areas tested were below the MDA of the counter (1000 dpm) indicating no areas of gross contamination. The follow-up evaluation of the wipes provided on the "FINAL COUNTING RESULTS" data sheet were obtained using the more sensitive NaI well detector and also indicated no areas of greater than MDA (208 dpm, 0.00009 uCi) of the system.

These data sheets and this report comprise the test results. All areas tested measured less than 200 dpm per 100 cm² both on the preliminary and final measurement. Preliminary results showed no sample, individual or bulk, measured more than 2000 dpm and only three measurements had count rates greater then 1 $\frac{1}{2}$ deviations from zero. The swipes in these three bulk samples when counted individually, all were less than 500 dpm. The preliminary results indicated the spaces were clear.

As a confirmation the same wipe samples were counted in the NaI well counter and all indicated no contamination above the MDA of the counter (0.00009 uCi).

Diagrams of the each of the areas tested are provided indicating the location of each of the samples. Also, a general (not to scale) diagram showing the overall layout of the clinic is also provided.

THE SPACES ARE FREE RELEASED AS NO SIGNIFICANT RADIATION LEVELS OR REMOVABLE CONTAMINATION WAS FOUND.

Laurence & Porr

Laurence F. Parr, MS, DABR

PRELIMINARY COUNTING RESULTS

BACK	GROL	JND MEASU	REME	TNS:
	Count		Count	σ of Count
Run No.	Time	Gross Counts	Rate	Rate
1	20	213	10.65	0.73
2	20	198	9.90	0.70
3	20	218	10.90	0.74
4	20 [·]	214	10.70	0.73
5	20	220	11.00	0.74
6	20	218	10.90	0.74
		Average=	10.68	0.40

Date: May 20, 2006

MDA	MDA CALCULATIONS:NA Delux Wipe Counter											
	Activity in	Count	Gross	Net	μCi/cpm	MDA	MDA					
Isotope	μCi	Time	Counts	Counts		(uCi)	(dpm)					
Cs-137	0.075	5	460	89.87	0.000835	0.00101	2215					
Co-60	0.0124	5	290	55.87	0.000222	0.00027	589					
Tc99m	0.1	. 5	2550	507.87	0.000197	0.00024	523					

BATCH MEASUREMENTS:

AREA	Batch Samples	Area of Swipe	Count Time	Gross Counts	Gross Count Rate	σ Gross Count Rate	Net Count Rate	σ Net Count uCi Rate	Removable uCi	DPM per 100 cm ²	Acceptable (<2000 DPM/100 cm ²)
	BKG				10.68	0.40					
Camera rm 2	1-1 thru 1-5	300	5.00	60.00	12.00	1.55	1.33	1.60 0.00026	0.00031	191	OK
	1-6 thru 1-10	300	5.00	59.00	11.80	1.54	1.13	1.59 0.00022	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	1-11 thru 1-15	300	5.00	61.00	12.20	1.56	1.53	1.61 0.00030	0.00036	220	OK
	1-16 thru 1-20	300	5.00	54.00	10.80	1.47	0.12	1.52 0.00002	<mda< td=""><td></td><td>ок</td></mda<>		ок
	1-21 thru 1-25	300	5.00	49.00	9.80	1.40	-0.88	1.46 -0.0001	7 <mda< td=""><td></td><td>ОК</td></mda<>		ОК
	1-25 thru 1-29	300	5.00	52.00	10.40	1.44	-0.28	1.50 -0.0000	5 <mda< td=""><td></td><td>ок</td></mda<>		ок
Rad Pharm	2-1 thru 2-5	250	5.00	52.00	10.40	1.44	-0.28	1.50 -0.0000	5 <mda< td=""><td></td><td>OK</td></mda<>		OK
	2-6 thru 2-10	250	5.00	55.00	11.00	1.48	0.32	1.54 0.00006	<mda< td=""><td></td><td>ок</td></mda<>		ок
	2-11 thry 2-14	250	5.00	62.00	12.40	1.57	1.73	1.63 0.00034	0.00041	299	OK
	2-16 thru 2-20	250	5.00	59.00	11.80	1.54	1.13	1.59 0.00022	<mda< td=""><td></td><td>OK</td></mda<>		OK
	2-21 thru 2-25	250	[~] 5.00	51.00	10.20	1.43	-0.48	1.48 -0.0000	9 <mda< td=""><td></td><td>OK</td></mda<>		OK
	2-26 thru 2-30	250	5.00	62.00	12.40	1.57	1.73	1.63 0.00034	0.00041	299	OK
	2-31 thru 2-35	250	5.00	59.00	11.80	1.54	1.13	1.59 0.00022	<mda< td=""><td></td><td>ок</td></mda<>		ок
	2-36 thru 2-40	250	5.00	53.00	10.60	1.46	-0.08	1.51 -0.0000	1 <mda< td=""><td></td><td>OK</td></mda<>		OK
	2-41- thru 2-45	250	5.00	57.00	11.40	1.51	0.72	1.56 0.00014	<mda< td=""><td></td><td>OK</td></mda<>		OK
Dose room	3-1 thru 3-9	250	5.00	63.00	12.60	1.59	1.93	1.64 0.00038	0.00046	334	OK
	3-10 thru 3-19	250	5.00	57.00	11.40	1.51	0.72	1.56 0.00014	<mda< td=""><td></td><td>ок</td></mda<>		ок
Bathtroom	4-1 thru 4-6	250	5.00	61.00	12.20	1.56	1.53	1.61 0.00030	0.00036	264	OK
Thyroid uptake	5-1 thru 5-5	300	5.00	72.00	14.40	1.70	3.73	1.74 0.00073	0.00088	538	ок
		1 300	5.00	61.00	12.20	1.56	1.53	1.61 0.00030	0.00036	220	ok
		2 300	5.00	59.00	11.80	1.54	1.13	1.59 0.00022	<mda< td=""><td></td><td>OK</td></mda<>		OK

AREA	Batch Samples	Area of Swipe	Count Time	Gross Counts	Gross Count Rate	σ Gross Count Rate	Net Count Rate	σ Net Count uCi Rate	Removable uCi	DPM per 100 cm ²	Acceptable (<2000 DPM/100 cm ²)
<u>,</u>	3	300	5.00	54.00	10.80	1.47	0.12	1.52 0.00002	<mda< td=""><td></td><td>ок</td></mda<>		ок
	4	300	5.00	57.00	11.40	1.51	0.72	1.56 0.00014	<mda< td=""><td></td><td>OK</td></mda<>		OK
	5	300	5.00	50.00	10.00	1.41	-0.68	1.47 -0.00013	<mda< td=""><td></td><td>OK</td></mda<>		OK
	5-6 trun 5-10	300	5.00	61.00	12.20	1.56	1.53	1.61 0.00030	0.00036	220	OK
	5-11 thru 5-15	300	5.00	59.00	11.80	1.54	1.13	1.59 0.00022	<mda< td=""><td></td><td>OK</td></mda<>		OK
Waiting Area	6-1 thru 6-5	300	5.00	53.00	10.60	1.46	-0.08	1.51 -0.00001	<mda< td=""><td></td><td>OK</td></mda<>		OK
Ũ	6-6 thru 6-10	300	5.00	43.00	8.60	1.31	-2.08	1.37 -0.00041	<mda< td=""><td></td><td>OK</td></mda<>		OK
	6-31 thru 6-35	300	5.00	53.00	10.60	1.46	-0.08	1.51 -0.00001	<mda< td=""><td></td><td>ок</td></mda<>		ок
	6-36 thru 6-39	300	5.00	62.00	12.40	1.57	1.73	1.63 0.00034	0.00041	249	ок
	L-shield	300	5.00	45.00	9.00	1.34	-1.68	1.40 -0.00033	<mda< td=""><td></td><td>OK</td></mda<>		OK
Camera rm 1	7-1 thru 7-5	300	5.00	52.00	10.40	1.44	-0.28	1.50 -0.00005	<mda< td=""><td></td><td>ок</td></mda<>		ок
	7-6 thru 7-10	300	5.00	56.00	11.20	1.50	0.52	1.55 0.00010	<mda< td=""><td></td><td>ок</td></mda<>		ок
	7-11 thru 7-15	300	5.00	59.00	11.80	1.54	1.13	1.59 0.00022	<mda< td=""><td></td><td>ок</td></mda<>		ок
	7-16 thru 7-20	300	5.00	68.00	13.60	1.65	2.93	1.70 0.00058	0.00069	422	οκ
	16	300	5.00	52.00	10.40	1.44	-0.28	1.50 -0.00005	<mda< td=""><td></td><td>ок</td></mda<>		ок
	17	300	5.00	52.00	10.40	1.44	-0.28	1.50 -0.00005	<mda< td=""><td></td><td>ок</td></mda<>		ок
	18	300	5.00	48.00	9.60	1.39	-1.08	1.44 -0.00021	<mda< td=""><td></td><td>OK</td></mda<>		OK
	19	300	5.00	54.00	10.80	1.47	0.12	1.52 0.00002	<mda< td=""><td></td><td>ок</td></mda<>		ок
	20	300	5.00	55.00	11.00	1.48	0.32	1.54 0.00006	<mda< td=""><td></td><td>ок</td></mda<>		ок
	7-21 thru 7-25	300	5.00	53.00	10.60	1.46	-0.08	1.51 -0.00001	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	7-26 thru 7-30	300	5.00	43.00	8.60	1.31	-2.08	1.37 -0.00041	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	7-31 thru 7-35	300	5.00	53.00	10.60	1.46	-0.08	1.51 -0.00001	<mda< td=""><td></td><td>ок</td></mda<>		ок
	7-36 thru 7-39	300	5.00	62.00	12.40	1.57	1.73	1.63 0.00034	0.00041	249) ОК
Tech Work Area	8-1 thru 8-5	300	5.00	48.00	9.60	1.39	-1.08	1.44 -0.00021	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	8-6 thru 8-10	300	5.00	55.00	11.00	1.48	0.32	1.54 0.00006	<mda< td=""><td></td><td>ок</td></mda<>		ок
	8-11 thru 8-15	300	5.00	46.00	9.20	1.36	-1.48	1.41 -0.00029	<mda< td=""><td></td><td>OK</td></mda<>		OK
	8-16 thru 8-20	300	5.00	55.00	11.00	1.48	0.32	1.54 0.00006	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	8-21 thru 8-25	300	5.00	58.00	11.60	1.52	0.92	1.58 0.00018	<mda< td=""><td></td><td>ок</td></mda<>		ок
	8-26 thru 8-30	300	5.00	68.00	13.60	1.65	2.93	1.70 0.00058	0.00069	422	2 OK
	26	300	5.00	59.00	11.80	1.54	1.13	1.59 0.00022	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	27	300	5.00	56.00	11.20	1.50	0.52	1.55 0.00010	<mda< td=""><td></td><td>ок</td></mda<>		ок
	28	300	5.00	61.00	12.20	1.56	1.53	1.61 0.00030	0.00036	220) ок
	29	300	5.00	54.00	10.80	1.47	0.12	1.52 0.00002	<mda< td=""><td></td><td>ок</td></mda<>		ок
	30	300	5.00	52.00	10.40	1.44	-0.28	1.50 -0.00005	<mda< td=""><td></td><td>ок</td></mda<>		ок
	8-31	300	5.00	49.00	9.80	1.40	-0.88	1.46 -0.00017	<mda< td=""><td></td><td>ок</td></mda<>		ок

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FINAL COUNTING RESULTS

BACKGROUND MEASUREMETNS:											
	Count		Count	σ of Count							
Run No.	Time	Gross Counts	Rate	Rate							
1	1	120	120.00	10.95							
2	1	140	140.00	11.83							
3	1	109	109.00	10.44							
4	1	134	134.00	11.58							
5	1	129	129.00	11.36							
6	1	137	137.00	11.70							
	6	769	128.17	4.62							

Date: May 24, 2006

MDA	MDA CALCULATIONS: Captus 3000 w/ 2" Nal Well											
	Activity in	Count	Gross	Net	μCi/cpm	MDA	MDA					
Isotope	μCi	Time	Counts	Counts		(uCi)	(dpm)					
Cs-137	0.5	1	73403	73274.83	0.000007	0.00009	208					
1												
ļ												
1												

BATCH MEASUREMENTS:

AREA	Batch Samples	Area of Swipe	Count Time	Gross Counts	Gross Count Rate	σ Gross Count Rate	Net Count Rate	σ Net Count Rate	uCi	Removable uCi	DPM per 100 cm ²	(<2000 DPM/100 cm ²)
	BKG				128.17	4.62						
Camera rm 2	1-1 thru 1-5	300	1.00	118.00	118.00	10.86	-10.17	11.81 -0.	.00007	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	1-6 thru 1-10	300	1.00	128.00	128.00	11.31	-0.17	12.22 0.0	00000	<mda< td=""><td></td><td>OK</td></mda<>		OK
	1-11 thru 1-15	300	1.00	133.00	133.00	11.53	4.83	12,42 0.0	00003	<mda< td=""><td></td><td>ок</td></mda<>		ок
	1-16 thru 1-20	300	1.00	119.00	119.00	10.91	-9.17	11.85 -0.	.00006	<mda< td=""><td></td><td>OK</td></mda<>		OK
	1-21 thru 1-25	300	1.00	129.00	129.00	11.36	0.83	12.26 0.0	00001	<mda< td=""><td></td><td>OK</td></mda<>		OK
	1-25 thru 1-29	300	1.00	134.00	134.00	11.58	5.83	12.46 0.0	00004	<mda< td=""><td></td><td>OK</td></mda<>		OK
Rad Pharm	2-1 thru 2-5	250	1.00	135.00	135.00	11.62	6.83	12.50 0.0	00005	<mda< td=""><td></td><td>ок</td></mda<>		ок
	2-6 thru 2-10	250	1.00	138.00	138.00	11.75	9.83	12.62 0.0	00007	<mda< td=""><td></td><td>OK</td></mda<>		OK
	2-11 thry 2-14	250	1.00	123.00	123.00	11.09	-5.17	12.02 -0.	.00004	<mda< td=""><td></td><td>OK</td></mda<>		OK
	2-16 thru 2-20	250	1.00	110.00	110.00	10.49	-18.17	11.46 -0.	.00012	<mda< td=""><td></td><td>OK</td></mda<>		OK
	2-21 thru 2-25	250	1.00	145.00	145.00	12.04	16.83	12.90 0.0	00011	<mda< td=""><td></td><td>OK</td></mda<>		OK
	2-26 thru 2-30	250	1.00	133.00	133.00	11.53	4.83	12.42 0.0	00003	<mda< td=""><td></td><td>OK</td></mda<>		OK
	2-31 thru 2-35	250	1.00	129.00	129.00	11.36	0.83	12.26 0.0	00001	<mda< td=""><td></td><td>ок</td></mda<>		ок
	2-36 thru 2-40	250	1.00	118.00	118.00	10.86	-10.17	11.81 -0.	.00007	<mda< td=""><td></td><td>ок</td></mda<>		ок
	2-41- thru 2-45	250	1.00	136.00	136.00	11.66	7.83	12.54 0.0	00005	<mda< td=""><td></td><td>OK</td></mda<>		OK
Dose room	3-1 thru 3-9	250	1.00	123.00	123.00	11.09	-5.17	12.02 -0.	.00004	<mda< td=""><td></td><td>OK</td></mda<>		OK
	3-10 thru 3-19	250	1.00	139.00	139.00	11.79	10.83	12.66 0.0	00007	<mda< td=""><td></td><td>OK</td></mda<>		OK
Bathtroom	4-1 thru 4-6	250	1.00	118.00	118.00	10.86	-10.17	11.81 -0.	.00007	<mda< td=""><td></td><td>OK</td></mda<>		OK
Thyroid uptake	5-1 thru 5-5	300	1.00	106.00	106.00	10.30	-22.17	11.29 -0.	.00015	<mda< td=""><td></td><td>OK</td></mda<>		OK
	5-6 trun 5-10	300	1.00	131.00	131.00	11.45	2.83	12.34 0.0	00002	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	5-11 thru 5-15	300	1.00	129.00	129.00	11.36	0.83	12.26 0.0	00001	<mda< td=""><td></td><td>ок</td></mda<>		ок

AREA	Batch Samples	Area of Swipe	Count Time	Gross Counts	Gross Count Rate	σ Gross Count Rate	Net Count Rate	σ Net Count Rate	uCi	Removable uCi	DPM per 100 cm ²	Acceptable (<2000 DPM/100 cm ²)
Waiting Area	6-1 thru 6-5	300	1.00	118.00	118.00	10.86	-10.17	11.81 -(0.00007	<mda< td=""><td></td><td>ок</td></mda<>		ок
J	6-6 thru 6-10	300	1.00	124.00	124.00	11.14	-4.17	12.06 -(0.00003	<mda< td=""><td></td><td>OK</td></mda<>		OK
	6-31 thru 6-35	300	1.00	139.00	139.00	11.79	10.83	12.66 0	.00007	<mda< td=""><td></td><td>OK</td></mda<>		OK
	6-36 thru 6-39	300	1.00	136.00	136.00	11.66	7.83	12.54 0	.00005	<mda< td=""><td></td><td>OK</td></mda<>		OK
	L-shield	300	1.00	132.00	132.00	11.49	3.83	12.38 0	0.00003	<mda< td=""><td></td><td>OK</td></mda<>		OK
Camera rm 1	7-1 thru 7-5	300	1.00	120.00	120.00	10.95	-8.17	11.89 -(0.00006	<mda< td=""><td></td><td>OK</td></mda<>		OK
	7-6 thru 7-10	300	1.00	139.00	139.00	11.79	10.83	12.66 0	.00007	<mda< td=""><td></td><td>ок</td></mda<>		ок
	7-11 thru 7-15	300	. 1.00	141.00	141.00	11.87	12.83	12.74 0	.00009	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	7-16 thru 7-20	300	1.00	112.00	112.00	10.58	-16.17	11.55 -	0.00011	<mda< td=""><td></td><td>ОК</td></mda<>		ОК
	7-21 thru 7-25	300	1.00	132.00	132.00	11.49	3.83	12.38 0).00003	<mda< td=""><td></td><td>OK</td></mda<>		OK
	7-26 thru 7-30	300	1.00	154.00	154.00	12.41	25.83	13.24 0).00018	<mda< td=""><td></td><td>OK</td></mda<>		OK
	7-31 thru 7-35	300	1.00	129.00	129.00	11.36	0.83	12.26 0).00001	<mda< td=""><td></td><td>ок</td></mda<>		ок
	7-36 thru 7-39	300	1.00	111.00	111.00	10.54	-17.17	11.50 -	0.00012	<mda< td=""><td></td><td>ок</td></mda<>		ок
Tech Work Area	8-1 thru 8-5	300	1.00	122.00	122.00	11.05	-6.17	11.97 -	0.00004	<mda< td=""><td></td><td>ок</td></mda<>		ок
	8-6 thru 8-10	300	1.00	129.00	129.00	11.36	0.83	12.26 0	0.00001	<mda< td=""><td></td><td>ок</td></mda<>		ок
	8-11 thru 8-15	300	1.00	135.00	135.00	11.62	6.83	12.50 0).00005	<mda< td=""><td></td><td>ок</td></mda<>		ок
	8-16 thru 8-20	300	1.00	114.00	114.00	10.68	-14.17	11.63 -	0.00010	<mda< td=""><td></td><td>OK</td></mda<>		OK
	8-21 thru 8-25	300	1.00	125.00	125.00	11.18	-3.17	12.10 -	0.00002	<mda< td=""><td></td><td>OK</td></mda<>		OK
	8-26 thru 8-30	300	1.00	141.00	141.00	11.87	12.83	12.74 0	0.00009	<mda< td=""><td></td><td>OK</td></mda<>		OK
	8-31	300	1.00	123.00	123.00	11.09	-5.17	12.02 -	0.00004	<mda< td=""><td></td><td>OK</td></mda<>		OK

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General Diagram of the Nuclear Medicine spaces for FRC located at Woodburn Avenue, Suite 110, Annandale, Virginia. Diagram not to scale.

The above is an approximation of the FRC Nuclear Medicine Clinic to be free released. Although the diagram is to exact scanle, each of the blocks represents approximately 1 square foot based on floor tiles in the clinic. In all locationss except for the radiopharmacy and dose room, 3 x3 foot areas were checked using a thin window GM counter (Bicron 200) by sweeping the counter over the area at a distance of less than 1" in an effort to locate possible contamination. The walls were similarly checke dut not on a fixed grid pattern. Then all 3x3 areas were wiped with Rad-Wipe Smears from Biodex to verify that any removable contamination was below limits. The pharmacy and dose room were checked on a 2 x2 foot grid vice 3 x 3 grid. The following pages are larger diagrams of the eight general areas in the clinic and indicate the location of the grids used to test for contamination.





Radio-Pharmacy Wall and Cabinet Surevey Area 2 continued





Projection B









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

1102006, and to inform you that the initial processing which includes an administrative review has been performed.

There were no administrative omissions. Your application was assigned to a

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** <u>59136</u>. 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