Cardinal Health
6464 Canoga Avenue
Woodland Hills, CA 91367
818 737 4000 tel

www.cardinal.com

CardinalHealth

February 28, 2005

U.S. NRC Region III
801 Warrenville Road
Lisle, Illinois 60532-4351

RE: Request for Termination of Radioactive Material License No. 13-26367-01MD, Cardinal Health, Mishawaka, IN.

Attention Licensing:

We wish to terminate the above referenced license and request the release of the facility formerly used as a nuclear pharmacy located at 1301 Milburn Blvd., Suite 100, Mishawaka, IN. The facility ceased operations in January 2005 and does not intend to continue business at this location.

All radioactive materials were removed from the facility prior to the commencement of the decommissioning. No detectable radioactive contamination was found as a result of the decommissioning surveys. Please see the detailed Facility Decommissioning Report attached to this letter.

Once we receive a termination letter from your office, we will release the area for unrestricted public use. If you have any questions pertaining to this request, please contact me at (818) 737-4491.

Sincerely,

Kory Kodimer, Ph.D.
Manager, Health Physics

Cc: License File 201 (3)

Encl: Facility Decommissioning Report

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CardinalHealth

FACILITY DECOMMISSIONING REPORT

Cardinal Health
Nuclear Pharmacy Services

1301 Milburn Blvd
Mishawaka, IN 46544

Report by:

Chris Walters
Health Physicist
Quality & Regulatory
Cardinal Health
Nuclear Pharmacy Services

Facility and Operations

The nuclear pharmacy licensed by the State of Indiana resided at the location listed below. Use of radioactive materials was conducted under the license referenced below.

Pharmacy Location: 1301 Milburn Blvd
Mishawaka, IN 46544

Radioactive Materials License: #13-26367-01MD

Sources of Radiation

The information presented below addresses the requirements presented by the NRC in NUREG-1757.

1. Please see Attachment C for the *Certificate of Disposition of Radioactive Materials.*

2. The facility used radioactive materials for nuclear pharmacy operations and instrument calibrations or constancy checks. The facility ceased using the materials on January 28, 2005. Sealed sources were transferred to License No. 04-26507-MD prior to the decommissioning surveys. Radioactive waste was either decayed or transferred to a certified waste broker prior to the decommissioning surveys.

3. The table below lists all isotopes used at the facility over the span of the licensed activities, and includes the date of last use for each.

Isotope	Date Last Handled	Physical Form (S,G,L or Sealed)	Quantities (μCi, mCi or Ci)
Barium-133	1/28/05	Sealed	200 μCi
Carbon-14	1/28/05	S	15 μCi
Cesium-137	1/28/05	Sealed	200 μCi
Cobalt-57	1/28/05	Sealed	2.5 mCi
Gallium-67	1/20/05	L	20 mCi
Indium-111	1/27/05	L	1 mCi
Iodine-123	1/27/05	S	5 mCi
Iodine-131	1/26/05	L	300 mCi
Molybdenum-99	1/28/05	S	40 Ci
Phosphorus-32	10/3/04	L	5 mCi
Samarium-153	12/29/04	L	100 mCi
Strontium-89	12/9/04	L	4 mCi
Technetium-99m	1/28/05	L	35 Ci
Thallium-201	1/20/05	L	6 mCi
Xenon-133	1/28/05	G	2 Ci
Yttrium-90	1/18/05	L	40 mCi

There has been only one major radiological spill of any licensed material (e.g., greater than 100 mCi of Tc-99m or 1 mCi of I-131) requiring assistance in clean-up and monitoring from persons other than the user. More than 100 mCi of Tc-99m was spilled in the hotlab in August 1996. No personnel exposure or contamination resulted form this incident

During the life of the license, no sealed sources have been determined to be leaking.

Surveys and Monitoring

Surveys were conducted in both the restricted and unrestricted areas. All surfaces were surveyed for contamination in the restricted areas. Wipe tests for removable contamination were taken over a 100 cm^2 area every square meter in the restricted areas. In the unrestricted area, wipes and contamination surveys were taken on a larger grid and in areas of most probability for finding contamination (e.g., door handles, walkways from the restricted areas, etc.). The locations are identified on the diagram in Attachment A.

Contamination surveys were taken with the instrument listed below. Wipes were taken dry, unless otherwise indicated, with absorbent paper. Each wipe was counted on the analytical detector listed below. Operating specifications, efficiencies, and minimum detectable activities are also provided below.

EQUIPMENT		
Surveys	Make and Model of Survey Meter	**Ludlum 2350-1**
	Serial Number	**193712**
	Last Calibration Date	**5/4/2004**
	Background	**0.02 mR/hr (44-38) 140 cpm (44-89)**
	Make and Model Number of Probe	**Ludlum 44-38 Ludlum 44-89**
	Efficiency of Survey Meter	**N/A**
Wipes	Make and Model Number	**ScintiTech MCA Model 7SW8/2C1**
	Serial Number	**Unit #53**
	Window	**50-400 keV**
	Efficiency of Well Counter (for I-131 or Ba-133 open window)	**65.42%**
	Date of Efficiency	**12/10/04**
	Region of Interest	**50-400 keV**
	Count Time	**0.2 minutes (12 seconds)**
	Background	**105 cpm**
	MDA (must be <200 dpm)	**180 dpm**

Please see Attachment A for the impacted area map with wipe test locations indicated.

Please see Attachment B for the results of the wipe test survey of the impacted area.

A reference background was established for the portable survey meter in the non-impacted area, where there is similar construction to the materials encountered the impacted area. This was determined to be 30 μR/hr for the facility.

Waste and RAM Disposition

A search for radioactive materials and radioactive waste was performed, resulting in none found. All materials were transferred to another licensee prior to the survey.

During the life of the license, no underground piping or sink/sewer piping was used for disposal of radioactive materials (*excluding excreta*).

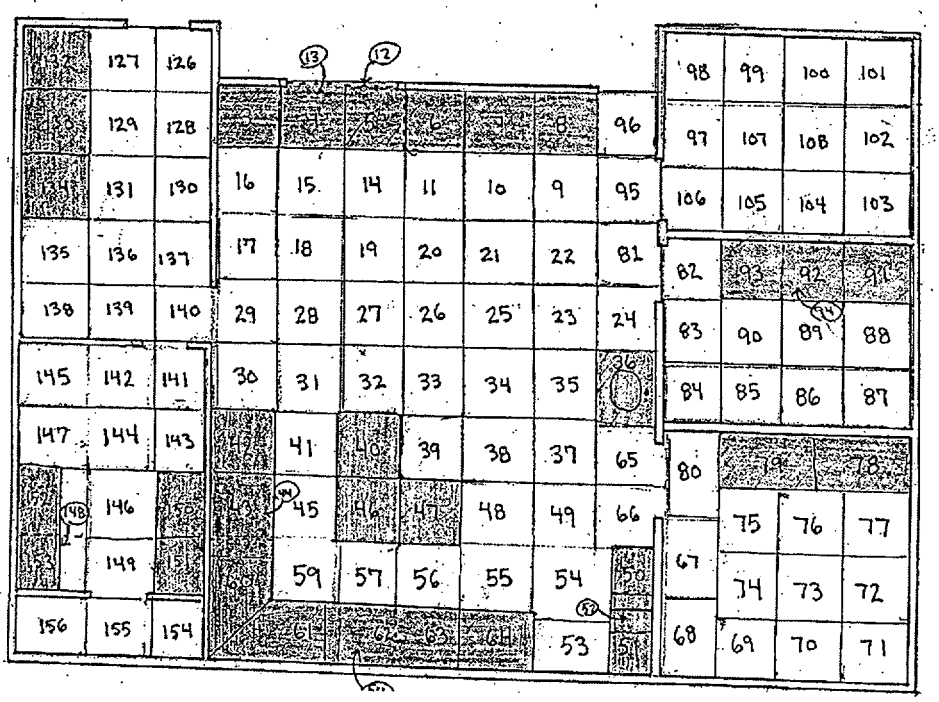
Please see Attachment C for a copy the Certificate of Disposition of Radioactive Materials and Surveyor Certification.

Please see Attachment D for a copy of the packing list showing receipt of sealed sources by an authorized licensee.

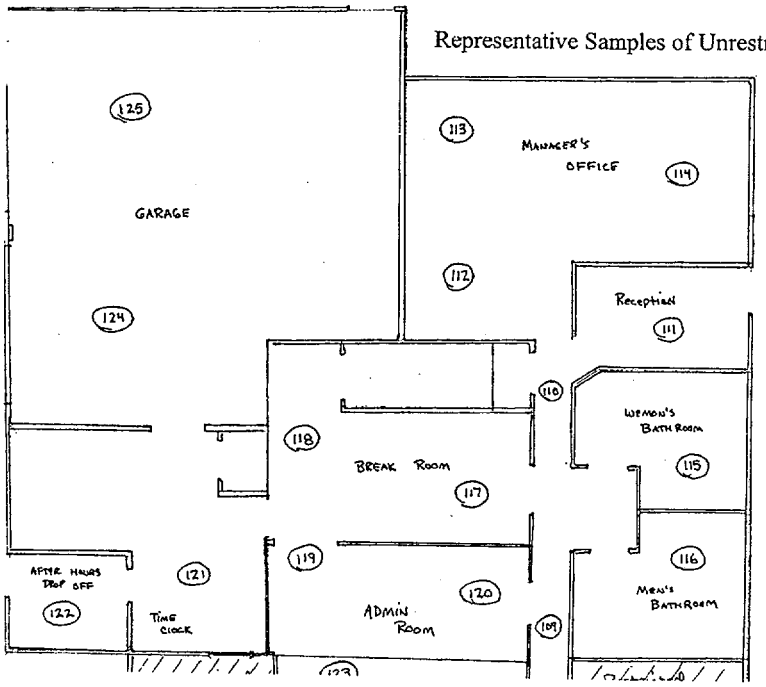
ATTACHMENT A

Survey Maps

1 X 1 Meter^2 Grid Map
Restricted Area



Representative Samples of Unrestricted Area



ATTACHMENT B

Wipe Test Surveys Results

Unrestricted Area Wipes

SCA Serial Number: Unit #53 Model 7SW8/2C1
Efficiency Date: 02/10/05
Window: 50-400
Efficiency: 65.42% c/d for Ba-133
Count time (minutes): 0.2 minute
Background (cpm): 105 cpm
MDA (dpm): 180 dpm **MUST BE LESS THAN 200 dpm**

FILL OUT CELLS SHADED IN BLUE

Area on Map		Location surveyed	Area Survey 44-38	Contamination Survey 44-89	Wipe (gross cpm)	Wipe (net cpm)	Wipe (dpm)	Flags
Room (e.g. Break Room)	Map Loc #	Floor/Wall	µR/h	cpm				
Hallway	109	Floor	9.96	145	50	0	0	OK
Hallway	110	Floor	8.15	204	105	0	0	OK
Reception	111	Floor	12.4	202	120	15	23	OK
Mgr. Office	112	Floor	2.94	250	115	10	15	OK
Mgr. Office	113	Floor	4.97	200	95	0	0	OK
Mgr. Office	114	Floor	15.2	149	100	0	0	OK
Restroom	115	Sink/Floor	13.6	261	140	35	54	OK
Restroom	116	Sink/Floor	7.47	184	90	0	0	OK
Breakroom	117	Floor	6.11	148	125	20	31	OK
Breakroom	118	Floor	2.71	111	110	5	8	OK
Admin.	119	Floor	18.6	191	60	0	0	OK
Admin.	120	Floor	15.6	169	50	0	0	OK
Timeclock	121	Floor	25.8	182	110	5	8	OK
Vestibule	122	Floor	9.28	210	60	0	0	OK
Admin.	123	Table Top	3.62	154	120	15	23	OK
Garage	124	Floor	20.8	198	100	0	0	OK
Garage	125	Floor	21.3	148	135	30	46	OK

Restricted Area Wipes

MCA Serial Number:	Unit #53	Model 7SW8/2C1
Efficiency Date:	02/10/05	
Window:	50-400	
Efficiency:	65.42% c/d for Ba-133	
Count time (minutes):	0.2 minute	
Background (cpm):	105 cpm	
MDA (dpm):	180 dpm	**MUST BE LESS THAN 200 dpm**

FILL OUT COLUMNS SHADED IN BLUE

Area on Map		**Location surveyed**	**Area Survey 44-38 (uR/h)**	**Contamination Survey 44-89 (CPM)**	**Wipe (gross cpm)**	**Wipe (net cpm)**	**Wipe (dpm)**	**Flags**
Room (e.g. Iodine Room)	Map Loc #	Floor/Wall	µR/h	cpm				
Hot Lab	3	Table Top	15	142	100	0	0	OK
Hot Lab	4	Table Top	26	126	130	25	38	OK
Hot Lab	5	Table Top	15	144	135	30	46	OK
Hot Lab	6	Table Top	4	131	130	25	38	OK
Hot Lab	7	Table Top	7	134	95	0	0	OK
Hot Lab	8	Table Top	3	120	130	25	38	OK
Hot Lab	9	Floor	5	159	140	35	54	OK
Hot Lab	10	Floor	2	175	130	25	38	OK
Hot Lab	11	Floor	10	144	100	0	0	OK
Hot Lab	12	Floor	7	162	85	0	0	OK
Hot Lab	13	Floor	19	150	145	40	61	OK
Hot Lab	14	Floor	12	170	190	85	130	OK
Hot Lab	15	Floor	12	188	145	40	61	OK
Hot Lab	16	Floor	14	151	140	35	54	OK
Hot Lab	17	Floor	19	131	150	45	69	OK
Hot Lab	18	Floor	13	144	80	0	0	OK
Hot Lab	19	Floor	8	161	220	115	176	OK
Hot Lab	20	Floor	12	136	100	0	0	OK
Hot Lab	21	Floor	5	153	90	0	0	OK
Hot Lab	22	Floor	2	168	125	20	31	OK
Hot Lab	23	Floor	5	165	170	65	99	OK
Hot Lab	24	Floor	1	164	180	75	115	OK
Hot Lab	25	Floor	13	145	115	10	15	OK
Hot Lab	26	Floor	27	171	130	25	38	OK
Hot Lab	27	Floor	17	211	145	40	61	OK
Hot Lab	28	Floor	13	117	105	0	0	OK
Hot Lab	29	Floor	12	153	160	55	84	OK
Hot Lab	30	Floor	17	163	165	60	92	OK
Hot Lab	31	Floor	10	210	120	15	23	OK
Hot Lab	32	Floor	10	144	105	0	0	OK
Hot Lab	33	Floor	8	167	110	5	8	OK
Hot Lab	34	Floor	10	122	170	65	99	OK
Hot Lab	35	Floor	4	166	180	75	115	OK
Hot Lab	36	Sink	2	158	120	15	23	OK
Hot Lab	37	Floor	5	198	100	0	0	OK
Hot Lab	38	Floor	13	165	180	75	115	OK
Hot Lab	39	Floor	11	169	105	0	0	OK
Hot Lab	40	Table Top	11	148	160	55	84	OK

Area on Map		Location surveyed	Area Survey 44-38 (uR/h)	Contamination Survey 44-89 (CPM)	Wipe (gross cpm)	Wipe (net cpm)	Wipe (dpm)	Flags
Hot Lab	41	Floor	17	189	185	80	122	OK
Hot Lab	42	Table Top	20	150	105	0	0	OK
Hot Lab	43	Table Top	20	145	115	10	15	OK
Hot Lab	44	Floor	18	152	115	10	15	OK
Hot Lab	45	Floor	13	121	130	25	38	OK
Hot Lab	46	Table Top	16	163	130	25	38	OK
Hot Lab	47	Table Top	9	228	75	0	0	OK
Hot Lab	48	Floor	8	138	115	10	15	OK
Hot Lab	49	Floor	8	132	100	0	0	OK
Hot Lab	50	Table Top	4	163	175	70	107	OK
Hot Lab	51	Table Top	6	145	155	50	76	OK
Hot Lab	52	Floor	6	147	115	10	15	OK
Hot Lab	53	Floor	16	132	105	0	0	OK
Hot Lab	54	Floor	7	155	65	0	0	OK
Hot Lab	55	Floor	14	123	165	60	92	OK
Hot Lab	56	Floor	9	151	110	5	8	OK
Hot Lab	57	Floor	20	150	165	60	92	OK
Hot Lab	58	Floor	24	152	115	10	15	OK
Hot Lab	59	Floor	13	162	110	5	8	OK
Hot Lab	60	Table Top	15	178	130	25	38	OK
Hot Lab	61	Table Top	7	162	140	35	54	OK
Hot Lab	62	Table Top	15	146	80	0	0	OK
Hot Lab	63	Table Top	25	193	120	15	23	OK
Hot Lab	64	Table Top	11	198	95	0	0	OK
Hot Lab	65	Floor	12	154	75	0	0	OK
Hot Lab	66	Floor	14	154	150	45	69	OK
WBC Room	67	Floor	10	138	120	15	23	OK
WBC Room	68	Floor	16	186	135	30	46	OK
WBC Room	69	Floor	9	226	80	0	0	OK
WBC Room	70	Floor	16	183	105	0	0	OK
WBC Room	71	Floor	14	170	180	75	115	OK
WBC Room	72	Floor	6	141	135	30	46	OK
WBC Room	73	Floor	11	134	125	20	31	OK
WBC Room	74	Floor	10	142	115	10	15	OK
WBC Room	75	Floor	15	139	165	60	92	OK
WBC Room	76	Floor	11	170	70	0	0	OK
WBC Room	77	Floor	5	178	115	10	15	OK
WBC Room	78	Table Top	15	150	95	0	0	OK
WBC Room	79	Table Top	8	159	125	20	31	OK
WBC Room	80	Floor	7	129	110	5	8	OK
Hot Lab	81	Floor	2	151	115	10	15	OK
Q.C. Room	82	Floor	1	198	90	0	0	OK
Q.C. Room	83	Floor	15	153	85	0	0	OK
Q.C. Room	84	Floor	13	144	105	0	0	OK
Q.C. Room	85	Floor	15	183	175	70	107	OK
Q.C. Room	86	Floor	26	184	105	0	0	OK
Q.C. Room	87	Floor	19	189	80	0	0	OK
Q.C. Room	88	Floor	8	158	85	0	0	OK
Q.C. Room	89	Floor	9	161	90	0	0	OK
Q.C. Room	90	Floor	5	191	85	0	0	OK
Q.C. Room	91	Table Top	16	144	135	30	46	OK
Q.C. Room	92	Table Top	15	159	85	0	0	OK

Area on Map		Location surveyed	Area Survey 44-38 (uR/h)	Contamination Survey 44-89 (CPM)	Wipe (gross cpm)	Wipe (net cpm)	Wipe (dpm)	Flags
Q.C. Room	93	Table Top	12	193	125	20	31	OK
Q.C. Room	94	Floor	8	179	155	50	76	OK
Hot Lab	95	Floor	4	167	120	15	23	OK
Hot Lab	96	Floor	11	131	115	10	15	OK
R.A.M. Storage	97	Floor	19	156	115	10	15	OK
R.A.M. Storage	98	Floor	10	118	125	20	31	OK
R.A.M. Storage	99	Floor	6	142	110	5	8	OK
R.A.M. Storage	100	Floor	8	167	115	10	15	OK
R.A.M. Storage	101	Floor	4	159	120	15	23	OK
R.A.M. Storage	102	Floor	16	200	65	0	0	OK
R.A.M. Storage	103	Floor	18	192	135	30	46	OK
R.A.M. Storage	104	Floor	10	182	190	85	130	OK
R.A.M. Storage	105	Floor	12	150	140	35	54	OK
R.A.M. Storage	106	Floor	7	142	100	0	0	OK
R.A.M. Storage	107	Floor	8	196	65	0	0	OK
R.A.M. Storage	108	Floor	4	200	130	25	38	OK
Waste Return/Gen.	126	Floor	3	164	70	0	0	OK
Waste Return/Gen.	127	Floor	28	180	120	15	23	OK
Waste Return/Gen.	128	Floor	17	195	95	0	0	OK
Waste Return/Gen.	129	Floor	13	177	125	20	31	OK
Waste Return/Gen.	130	Floor	10	177	105	0	0	OK
Waste Return/Gen.	131	Floor	24	146	90	0	0	OK
Waste Return/Gen.	132	Table Top	9	175	65	0	0	OK
Waste Return/Gen.	133	Table Top	13	201	130	25	38	OK
Waste Return/Gen.	134	Table Top	20	177	150	45	69	OK
Waste Return/Gen.	135	Gen. Box	15	159	70	0	0	OK
Waste Return/Gen.	136	Floor	12	184	135	30	46	OK
Waste Return/Gen.	137	Floor	18	136	105	0	0	OK
Waste Return/Gen.	138	Gen. Box	9	173	90	0	0	OK
Waste Return/Gen.	139	Floor	9	190	225	120	183	OK
Waste Return/Gen.	140	Floor	9	229	90	0	0	OK
Iodine Room	141	Floor	9	158	65	0	0	OK
Iodine Room	142	Floor	20	171	75	0	0	OK
Iodine Room	143	Floor	19	135	200	95	145	OK
Iodine Room	144	Floor	14	191	140	35	54	OK
Iodine Room	145	Floor	15	153	220	115	176	OK
Iodine Room	146	Floor	13	142	70	0	0	OK
Iodine Room	147	Floor	7	221	125	20	31	OK
Iodine Room	148	Floor	9	235	125	20	31	OK
Iodine Room	149	Floor	5	229	85	0	0	OK
Iodine Room	150	Table Top	7	239	125	20	31	OK
Iodine Room	151	Table Top	8	224	80	0	0	OK
Iodine Room	152	NaI Hood	11	214	75	0	0	OK
Iodine Room	153	NaI Hood	5	187	85	0	0	OK
Breaker/Utility	154	Floor	14	185	115	10	15	OK
Breaker/Utility	155	Floor	6	226	120	15	23	OK
Breaker/Utility	156	Floor	20	216	65	0	0	OK

Surveys Conducted By: Scott Van Heesbeke/Scott Morman

Form Completed By: Scott Van Heesbeke

Residual Activities

The table below includes all isotopes used at the facility over the span of the licensed activities. Sealed sources are not included since no source has ever been determined to be leaking over the lifetime of the facility.

A thorough wipe survey of the facility's restricted area was performed on 2/8/05. No contamination was discovered above the MDA (minimum detectable activity) for this counting system, which was 3.996E-4 µCi. A conservative residual activity estimate of 5.00E-4 µCi was therefore made for all isotopes. Then those activites were divided by the applicable Appendix C values, and the fractions summated.

Isotope	Residual Activity (µCi)	ALI [a] (µCi)	Fraction of ALI Value [b]
C-14	5.00E-04	2.00E+03	2.50E-07
Ga-67	5.00E-04	7.00E+03	7.14E-08
In-111	5.00E-04	4.00E+03	1.25E-07
I-123	5.00E-04	3.00E+03	1.67E-07
I-131	5.00E-04	3.00E+01	1.67E-05
Mo-99	5.00E-04	1.00E+03	5.00E-07
P-32	5.00E-04	6.00E+02	8.33E-07
Sm-153	5.00E-04	2.00E+03	2.50E-07
Sr-89	5.00E-04	6.00E+02	8.33E-07
Tc-99m	5.00E-04	8.00E+04	6.25E-09
Tl-201	5.00E-04	2.00E+04	2.50E-08
Xe-133	5.00E-04	2.00E+04	2.50E-08
Y-90	5.00E-04	4.00E+02	1.25E-06
	Sum of Fractions [c]		**2.10E-05**

1.05E-04

[a] Values taken from 10CFR20 Appendix B.

[b] Residual Activity/Appendix B Value

[c] Σ Fraction of Appendix B Values

ALI fraction:	2.10E-05
Multiplied by TEDE per ALI:	5000 mrem
Total dose to public:	**0.105 mrem**

Dose less than 3 mrem? **TRUE**

ATTACHMENT C

Certificate of Disposition of Materials

Surveyor Certification

NRC FORM 314 (7-2001) 10 CFR 30.36(j)(1); 40.42(j)(1); 70.38(j)(1); and 72.54(j)(1)

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0028 EXPIRES: 07/31/2004

Estimated burden per response to comply with this mandatory collection request: 30 minutes. This submittal is used by NRC as part of the basis for its determination that the facility is released for unrestricted use. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0028), Office of Management 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.

CERTIFICATE OF DISPOSITION OF MATERIALS

LICENSEE NAME AND ADDRESS	LICENSE NUMBER	DOCKET NUMBER
Cardinal Health 1301 Milburn Blvd. Mishawaka, IN 46544	13-26367-01MD	
	LICENSE EXPIRATION DATE: 03/31/2012	

A. LICENSE STATUS *(Check the appropriate box)*

☐ This license has expired. ☑ This license has not yet expired; please terminate it.

B. DISPOSAL OF RADIOACTIVE MATERIAL

(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

☐ 1. No radioactive materials have ever been procured or possessed by the licensee under this license.

☑ 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner.

☑ a. Transfer of radioactive materials to the licensee listed below:

Cardinal Health
3305 Lathrop Street, Suite 100 South Bend, IN 46628

☐ b. Disposal of radioactive materials:

☐ 1. Directly by the licensee:

☐ 2. By licensed disposal site:

☐ 3. By waste contractor:

☑ c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

C. SURVEYS PERFORMED AND REPORTED

☑ 1. A radiation survey was conducted by the licensee. The survey confirms:

☑ a. the absence of licensed radioactive materials

☐ b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.

☑ 2. A copy of the radiation survey results:

☑ a. is attached; or ☐ b. is not attached (Provide explanation); or ☐ c. was forwarded to NRC on: _____ (Date)

☐ 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and

☐ a. The results of the latest leak test are attached; and/or ☐ b. No leaking sources have ever been identified.

The person to be contacted regarding the information provided on this form:

NAME	TITLE	TELEPHONE (Include Area Code)	E-MAIL ADDRESS
Scott VanHeesbeke	Pharmacy Manager	574-233-5972	

Mail all future correspondence regarding this license to:

C. CERTIFYING OFFICIAL

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE	SIGNATURE	DATE
Scott Van Heesbeke - Manager		2-11-05

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

Surveyor Certification

Surveyor: Scott Van Heesbeke Pharmacy Manager
Authorized User, License No. 04-262507-01MD
Cardinal Health Location 201
Nuclear Pharmacy Services

Survey Location: **1301 Milburn Blvd.**
Mishawaka, IN 46544

Survey Date: **02/08/05**

Certification Statements:

1. All non-exempt radioactive material and waste was removed from the facility prior to performing the decommission surveys.

2. A gross search for radioactive material was performed and no material was present.

3. The background radiation levels measured at several locations in the non-impacted area of the facility measured 0.03 mR/hr, therefore the readings listed as "Survey gross mR/h" in the closeout survey data form are background at all locations measured in the impacted area of the facility.

4. The wipe test results on the Closeout Survey data sheet are shown in dpm per 100 cm^2. All wipe measurement results were less than the MDA and less than 200 dpm per 100 cm^2.

I certify the above data and statements to be true.

Print: Scott Van Heesbeke Sign: _____ Date: 2/11/05

ATTACHMENT D

SEALED SOURCE TRANSFER LOG

DATE OF TRANSFER: 1/28/05

TRANSFER FROM: Cardinal Health NPS Location #201
1301 Milburn Blvd
Mishawaka, IN 46544
License #13-26367-01MD

TRANSFER TO: Cardinal Health NPS Location #201
3305 Lathrop St.
South Bend, IN 46628
License #04-26507-01MD

Nuclide	Serial Number	Assay Activity	Assay Date	Current Activity (μCi)	Leak Test Date	Leak Test Results* (Pass/Fail)
Ba-133	941-85	0.55 μCi	9/15/02	0.47 μCi	2/4/05	P
Ba-133	A0137	286.3 μCi	2/1/92	121.61 μCi	2/4/05	P
Ba-133	A0251	0.10 μCi	2/1/92	0.04 μCi	2/4/05	P
Ba-133	780-94-6	4.46 μCi	2/1/04	4.18 μCi	2/4/05	P
Co-57	1014-63-19	5.08 mCi	1/1/04	1.77 mCi	2/4/05	P
Co-57	743-2-28	5.52 μCi	11/1/00	0.095 μCi	2/4/05	P
Co-57	934-44-19	5.41 μCi	10/1/02	0.574 μCi	2/4/05	P
Co-57	S206111-023	5.40 μCi	12/16/98	0.016 μCi	2/4/05	P
Co-57	S206070-076	5.50 μCi	4/27/93	0.076 nCi	2/4/05	P
Co-57	A0234	5.63 μCi	2/1/92	0.024 nCi	2/4/05	P
Co-57	S206088-070	5.50 μCi	10/25/95	0.814 nCi	2/4/05	P
Co-57	1011-65-4	0.10 μCi	12/1/03	0.032 μCi	2/4/05	P
Co-57	S137S039	0.12 nCi	9/27/95	0.017 nCi	2/4/05	P
Co-57	S137S045	0.12 nCi	7/27/98	0.242 nCi	2/4/05	P
Co-57	693-75-10	0.10 nCi	11/1/00	1.7 nCi	2/4/05	P
Cs-137	A0155	250.6 μCi	1/1/92	185.32 μCi	2/4/05	P
Cs-137	A0165	0.11 μCi	11/1/91	0.08 μCi	2/4/05	P

*Pass=Removable contamination less than 0.005 uCi.

Scott Morman
RSO Signature
Radiation Safety Officer

Scott Morman
Print Name

Align top of FedEx Shipping Label or Airbill here.

Express shipments only.

The Wo

Part # 156148-434 NRITA 12-04

Align bottom of Peel and Stick Airbill here.