BioStorage Technologies, Inc.
2910 Fortune Circle West, Suites A-B
Indianapolis, IN 46241

December 14, 2011

United States Nuclear Regulatory Commission/ Region III
Attn: Patricia Pelke, Chief, Materials Licensing Branch
2443 Warrenville Road
Suite 210
Lisle, Illinois 60532-4352

RE: Amendment Request: Removal of Location of Use
Byproduct Material License No. 13-32622-01
BioStorage Technologies, Inc.

Dear Ms. Pelke:

We request that our former location at **2655 Fortune Circle West, Suite A-B, Indianapolis, IN 46241** be removed as a location of use. Attached is the close-out survey of the former facility.

All operations have been transferred to facilities at our present address. Our latest amendment added our present address, which is our sole location of use.

If you have any questions, or need further information or documentation, do not hesitate to contact our Radiation Safety Officer, Thomas A. Schumacher, MS, CHP at (317) 902-9868, or radphysics@msn.com.

Thank you for your assistance.

Sincerely,

Greg Swanberg, Chief Executive Officer

Attachment: Close-out Survey

Facility Close-Out
Radiological Survey Report

Report Date: March 24, 2011
Survey Date: March 7, 2011

Facility: 2655 Fortune Circle West, Suites A-B, Indianapolis, IN 46241

Plan Prepared for:

BioStorage Technologies, Inc.
2910 Fortune Circle West Suite E
Indianapolis, IN 46241

Survey Goal: To ensure that residual surface radioactivity levels are below applicable federal and state standards for future unrestricted use.

Standards Guidance:

- All areas were surveyed using as guidance the provisions in the Nuclear Regulatory Commission's Title 10 Code of Federal Regulations, Part 20, Standards for Protection Against Radiation; including, but not limited to 10CFR 20.1402.

- All guidance regarding release of materials or surfaces for unrestricted use will follow the derived concentration guidance levels (DCGL values) as published in the Multi-Agency Radiation Surveys and Site Investigation Manual (MARSSIM).

Facility Description:

The building at 2655 Fortune Circle West, Suites A-B, Indianapolis, IN houses the former storage location of BioStorage Technologies, Inc.'s biological samples. Its areas of use included

1. a receiving dock,
2. a receipt and processing area,
3. an area housing numerous upright standalone freezers,
4. two enclosed freezer rooms, and
5. a locked ambient sample cage.

The building was secured at all times, with additional layers of security within the facility storage freezers and rooms themselves. See attached site diagram for the location and relationship of these areas to one another. The floors were covered with an epoxy-based, releasable paint, the benchtops were stainless steel and the shelves in the freezers rooms and cages were chrome-covered steel. The receipt and processing area

contained the only sink in the facility, where on a few occasions, samples were disposed of via sanitary sewerage by the Radiation Safety Officer. These were the sole occasions where radioactive samples were opened in any way. At all other times, the samples were kept closed, intact, and sealed inside their original containers is which they were shipped for storage.

Radionuclide Use History:

Based on records of prior use, radioactive storage consisted of only Carbon-14 (C-14) and Hydrogen-3 (tritium) samples. The majority of the samples were C-14 labeled animal and human tissue samples, excreta, and body fluids. All were received and kept frozen or refrigerated, sequestered in freezers or freezer rooms. There is *no* record of any alpha radiation-emitting radionuclides being used in the lab.

Routine, approximately monthly wipe samples for removable contamination were conducted by the Radiation Safety Officer. A review of wipe records shows that there has never been contamination above three times background at any location in the facility from the inception of licensed activities.

Task Summary:

Surveys:

Removable Contamination measurements ("swipe tests") were made and assayed in a Packard liquid scintillation counter (LSC), model LS-6000IC, (*calibrated/ efficiency-tested 2/15/11*). Liquid scintillation counting is required to detect and quantify any tritium contamination, and provides excellent detection of C-14 contamination.

Background Determinations: Background readings the liquid scintillation counter were 214 and 4 cpm, respectively, in the H-3 and C-14 counting regions. All backgrounds were subtracted from the gross counting results to obtain a net sample count rate.

Survey Locations and Area Rates: Representative, wide-area, external surface radiation surveys and wipe tests were made of all bench tops, floors, and the sink in the area. All freezers containing the samples had been moved from the immediate area. Surveys were made at a minimum rate of 400 cm^2 per m^2 of surface in the active use areas. Survey locations are noted on the attached facility diagram, with results following using sufficient descriptors or numbered diagram keys to be able to trace any elevated readings for subsequent decontamination.

Action Levels, Decontamination and Resurveying: The survey plan called for areas or items found to possess greater than 10,000 dpm/100 cm^2 of H-3 or 1000 dpm/100 cm^2 of C-14 to be resurveyed with more extensive scrutiny with numerous, smaller-area (100 cm^2) wipe samples. If further testing confirms the initial

wipe results, the area would be decontaminated, and a second external survey and wipe test will be conducted on the same item or area. This is repeated until the area or item is below the action threshold.

Contamination Survey Results

The liquid scintillation counter examined three regions of interest, covering the energies of all common research radionuclides. The results are attached on the following pages to this report.

Conclusions/Recommendations:

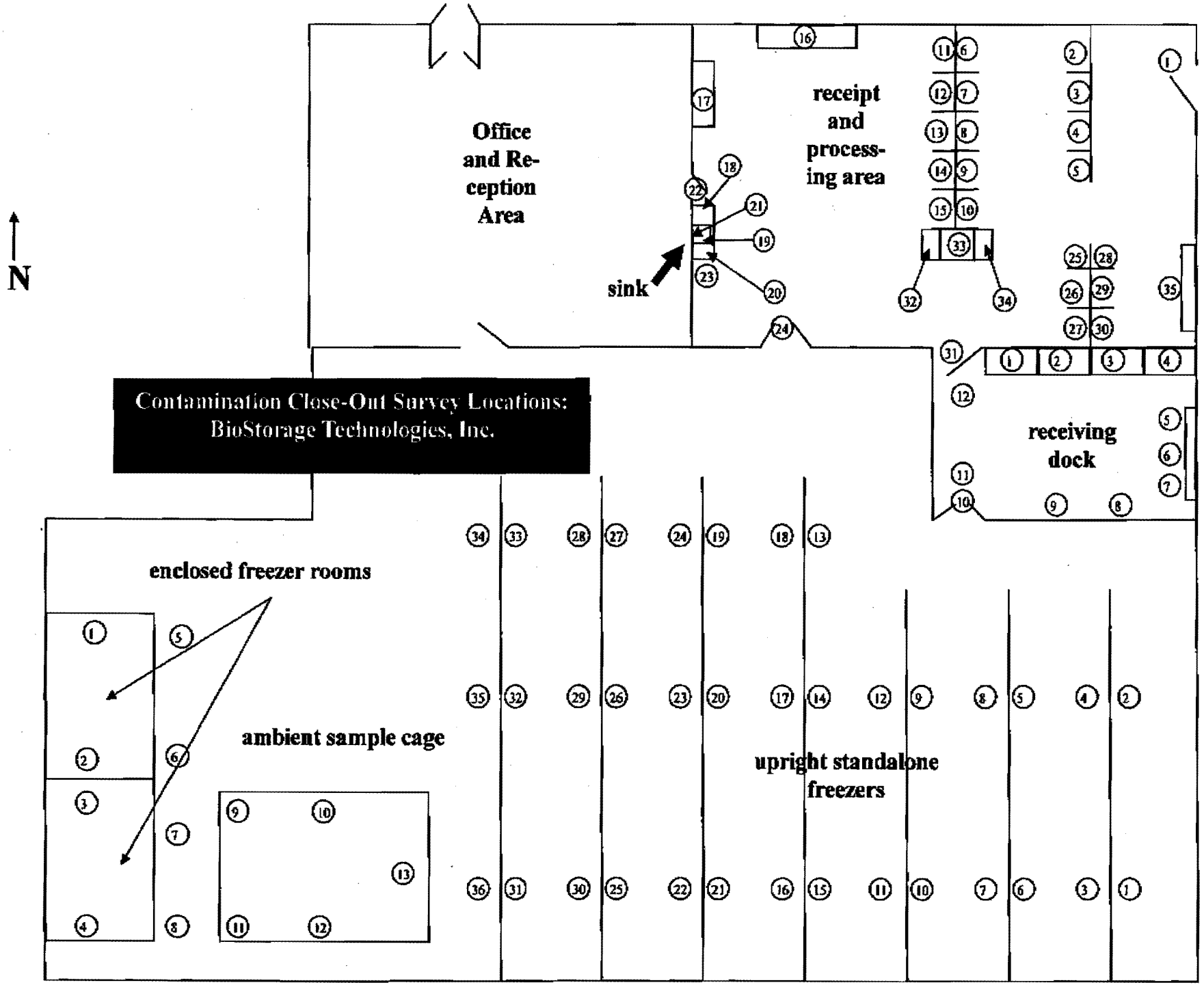
All areas are below release limits for the radionuclides that were historically used in the area.

References:

a) United States Department of Defense, United States Department of Energy, United States Environmental Protection Agency, and United States Nuclear Regulatory Commission; Multi-Agency Radiation Surveys and Site Investigation Manual (MARSSIM); 1998
b) Title 10, Code of Federal Regulations
c) 410 Indiana Administrative Code Part 5, the Indiana Rule for Radiation Control
d) The Health Physics and Radiological Health Handbook, Scinta, Inc., 1992

Thomas A. Schumacher

Thomas A. Schumacher, MS, CHP
Certified Health Physicist
Radiation Safety Officer



Biostorage Technologies Close-Outs

PAGE: 1

ID: SWIPE TESTS 10 MAR 2011 07:52

USER: 1 COMMENT:DO NOT CHANGE

PRESET TIME :	1.00						
DATA CALC :	CPM	H# :YES	SAMPLE REPEATS:	1	PRINTER	: STD	
COUNT BLANK :	NO	IC# : NO	REPLICATES :	1	RS232	: STD	
TWO PHASE :	NO	AQC : NO	CYCLE REPEATS :	1			
SCINTILLATOR:	LIQUID	LUMEX: NO	LOW SAMPLE REJ:	0			
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:			none		

ISOTOPE 1:	3H	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
ISOTOPE 2:	14C	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
ISOTOPE 3:	32P	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0

SAM NO	POS	TIME MIN	H#	3H CPM	3H %ERROR	14C CPM	14C %ERROR	32P CPM	32P %ERROR	LUMEX %	ELAPSED TIME
1	**-1	1.00	547.7	214.00	13.67	4.00	100.00	0.00	0.00	100.00	1.68
MISSING SAMPLE											
3	**-3	1.00	547.6	234.00	13.07	10.00	63.25	0.00	0.00	92.39	3.43
4	**-4	1.00	547.9	253.00	12.57	11.00	60.30	0.00	0.00	85.79	5.18
5	**-5	1.00	544.4	202.00	14.07	10.00	63.25	0.00	0.00	76.04	6.90
6	**-6	1.00	549.1	237.00	12.99	11.00	60.30	0.00	0.00	79.89	8.64
7	**-7	1.00	548.9	245.00	12.78	6.00	81.65	0.00	0.00	95.56	10.36
8	**-8	1.00	547.3	195.00	14.32	8.00	70.71	0.00	0.00	91.65	12.12
9	**-9	1.00	548.8	218.00	13.55	14.00	53.45	0.00	0.00	82.08	13.84
10	**-10	1.00	547.8	208.00	13.87	12.00	57.74	0.00	0.00	84.66	15.59
11	**-11	1.00	549.1	179.00	14.95	7.00	75.59	0.00	0.00	96.07	17.32
12	**-12	1.00	547.9	186.00	14.66	7.00	75.59	0.00	0.00	92.69	19.07
13	**-1	1.00	547.2	190.00	14.51	13.00	55.47	0.00	0.00	90.56	20.90
14	**-2	1.00	547.4	205.00	13.97	14.00	53.45	0.00	0.00	82.20	22.67
15	**-3	1.00	548.5	177.00	15.03	9.00	66.67	0.00	0.00	95.04	24.40
16	**-4	1.00	548.5	186.00	14.66	3.00	115.47	0.00	0.00	90.80	26.16
17	**-5	1.00	547.1	183.00	14.78	4.00	100.00	0.00	0.00	84.33	27.88
18	**-6	1.00	547.2	207.00	13.90	13.00	55.47	0.00	0.00	82.44	29.64
19	**-7	1.00	546.7	184.00	14.74	10.00	63.25	0.00	0.00	87.74	31.36
20	**-8	1.00	547.5	233.00	13.10	12.00	57.74	0.00	0.00	85.80	33.13
21	**-9	1.00	547.7	201.00	14.11	8.00	70.71	0.00	0.00	100.00	34.86
22	**-10	1.00	548.5	253.00	12.57	6.00	81.65	0.00	0.00	86.09	36.63
23	**-11	1.00	548.1	237.00	12.99	12.00	57.74	0.00	0.00	80.48	38.38
24	**-12	1.00	547.6	215.00	13.64	8.00	70.71	0.00	0.00	84.51	40.14
25	**-1	1.00	548.4	243.00	12.83	16.00	50.00	0.00	0.00	80.63	41.98
26	**-2	1.00	547.7	197.00	14.25	8.00	70.71	0.00	0.00	94.67	43.74
27	**-3	1.00	550.1	234.00	13.07	4.00	100.00	0.00	0.00	94.72	45.48
28	**-4	1.00	548.6	182.00	14.82	8.00	70.71	0.00	0.00	93.48	47.23
29	**-5	1.00	548.6	144.00	16.67	10.00	63.25	0.00	0.00	96.90	48.96
30	**-6	1.00	549.3	201.00	14.11	10.00	63.25	0.00	0.00	86.46	50.71
31	**-7	1.00	549.0	241.00	12.88	6.00	81.65	0.00	0.00	87.42	52.44
32	**-8	1.00	549.1	211.00	13.77	7.00	75.59	0.00	0.00	92.37	54.20
33	**-9	1.00	548.7	234.00	13.07	16.00	50.00	0.00	0.00	90.21	55.95
34	**-10	1.00	549.6	252.00	12.60	11.00	60.30	0.00	0.00	83.68	57.71
35	**-11	1.00	549.1	221.00	13.45	6.00	81.65	0.00	0.00	94.17	59.44
36	**-12	1.00	548.4	208.00	13.87	10.00	63.25	0.00	0.00	93.87	61.21
37	**-1	1.00	547.5	164.00	15.62	7.00	75.59	0.00	0.00	92.82	63.04
MISSING SAMPLE											
39	**-3	1.00	549.4	178.00	14.99	6.00	81.65	0.00	0.00	82.81	64.79
40	**-4	1.00	547.5	174.00	15.16	10.00	63.25	0.00	0.00	86.61	66.53
41	**-5	1.00	548.3	160.00	15.81	7.00	75.59	0.00	0.00	100.00	68.28
42	**-6	1.00	547.9	180.00	14.91	4.00	100.00	0.00	0.00	90.37	70.00
43	**-7	1.00	549.0	208.00	13.87	12.00	57.74	0.00	0.00	85.00	71.76
44	**-8	1.00	548.0	158.00	15.91	13.00	55.47	0.00	0.00	100.00	73.48

PAGE: 2

SAM NO	POS	TIME MIN	H#	3H CPM	3H %ERROR	14C CPM	14C %ERROR	32P CPM	32P %ERROR	LUMEX %	ELAPSED TIME
45	**-9	1.00	548.3	192.00	14.43	10.00	63.25	0.00	0.00	98.00	75.26
46	**-10	1.00	546.3	169.00	15.38	10.00	63.25	0.00	0.00	91.55	76.98
47	**-11	1.00	548.2	190.00	14.51	8.00	70.71	0.00	0.00	86.86	78.73
48	**-12	1.00	547.1	214.00	13.67	12.00	57.74	0.00	0.00	87.08	80.45
49	**-1	1.00	547.5	257.00	12.48	10.00	63.25	0.00	0.00	86.56	82.33
50	**-2	1.00	548.6	244.00	12.80	11.00	60.30	1.00	200.00	76.47	84.07
MISSING SAMPLE											
52	**-4	1.00	550.2	2469.00	4.03	10.00	63.25	0.00	0.00	99.56	86.50
53	**-5	1.00	548.7	1630.00	4.95	7.00	75.59	0.00	0.00	97.93	88.54
54	**-6	1.00	549.6	1180.00	5.82	6.00	81.65	0.00	0.00	98.93	90.57
55	**-7	1.00	547.6	2357.00	4.12	4.00	100.00	0.00	0.00	97.62	92.82
56	**-8	1.00	547.5	2671.00	3.87	12.00	57.74	0.00	0.00	98.94	95.14
57	**-9	1.00	550.4	1521.00	5.13	6.00	81.65	0.00	0.00	98.00	97.19
58	**-10	1.00	549.2	2876.00	3.73	8.00	70.71	0.00	0.00	97.51	99.40
59	**-11	1.00	549.5	1160.00	5.87	8.00	70.71	0.00	0.00	96.04	101.48
60	**-12	1.00	547.5	1614.00	4.98	7.00	75.59	0.00	0.00	100.00	103.58
61	**-1	1.00	550.6	1220.00	5.73	7.00	75.59	0.00	0.00	99.46	105.69
62	**-2	1.00	550.7	1386.00	5.37	6.00	81.65	0.00	0.00	100.00	107.87
63	**-3	1.00	548.3	1067.00	6.12	6.00	81.65	0.00	0.00	95.27	109.86
64	**-4	1.00	551.7	4300.00	3.05	7.00	75.59	0.00	0.00	98.86	112.58
65	**-5	1.00	548.3	2327.00	4.15	4.00	100.00	0.00	0.00	95.68	114.82
66	**-6	1.00	551.0	2515.00	3.99	11.00	60.30	0.00	0.00	98.71	117.10
67	**-7	1.00	548.4	2543.00	3.97	10.00	63.25	0.00	0.00	100.00	119.37
68	**-8	1.00	544.0	5103.00	2.80	5.00	89.44	0.00	0.00	99.63	122.01
69	**-9	1.00	549.0	7364.00	2.33	5.00	89.44	0.00	0.00	98.83	124.56
70	**-10	1.00	551.6	5247.00	2.76	7.00	75.59	0.00	0.00	98.23	127.29
71	**-11	1.00	552.9	6824.00	2.42	5.00	89.44	0.00	0.00	99.99	129.99
72	**-12	1.00	549.7	4227.00	3.08	6.00	81.65	0.00	0.00	97.82	132.51
MISSING SAMPLE											
74	**-2	1.00	553.4	6955.00	2.40	4.00	100.00	0.00	0.00	98.80	135.63
75	**-3	1.00	552.2	5943.00	2.59	3.00	115.47	0.00	0.00	99.78	138.43
76	**-4	1.00	552.3	4680.00	2.92	11.00	60.30	0.00	0.00	99.62	141.28
77	**-5	1.00	550.9	6454.00	2.49	5.00	89.44	0.00	0.00	99.79	144.11
78	**-6	1.00	550.9	3696.00	3.29	14.00	53.45	0.00	0.00	100.00	146.61
79	**-7	1.00	552.0	3588.00	3.34	8.00	70.71	0.00	0.00	100.00	149.27
80	**-8	1.00	551.8	6338.00	2.51	3.00	115.47	0.00	0.00	100.00	152.10
81	**-9	1.00	550.4	1779.00	4.74	5.00	89.44	0.00	0.00	94.23	154.28
82	**-10	1.00	552.3	2328.00	4.15	9.00	66.67	0.00	0.00	99.43	156.41
83	**-11	1.00	553.3	2521.00	3.98	11.00	60.30	0.00	0.00	99.53	158.68
84	**-12	1.00	554.7	3513.00	3.37	4.00	100.00	0.00	0.00	100.00	161.16
85	**-1	1.00	550.5	2071.00	4.39	5.00	89.44	0.00	0.00	100.00	163.63
86	**-2	1.00	550.5	1611.00	4.98	6.00	81.65	0.00	0.00	100.00	165.66
87	**-3	1.00	554.7	6812.00	2.42	7.00	75.59	0.00	0.00	100.00	168.66
88	**-4	1.00	549.2	228.00	13.25	8.00	70.71	0.00	0.00	94.12	170.41
89	**-5	1.00	549.4	315.00	11.27	6.00	81.65	0.00	0.00	88.37	172.19
90	**-6	1.00	550.3	285.00	11.85	12.00	57.74	0.00	0.00	97.32	173.93
91	**-7	1.00	549.0	235.00	13.05	14.00	53.45	0.00	0.00	93.36	175.82
92	**-8	1.00	550.6	249.00	12.67	10.00	63.25	0.00	0.00	97.38	177.68
93	**-9	1.00	548.5	262.00	12.36	9.00	66.67	0.00	0.00	85.43	179.44
94	**-10	1.00	550.0	241.00	12.88	9.00	66.67	0.00	0.00	90.85	181.18
95	**-11	1.00	549.0	212.00	13.74	7.00	75.59	0.00	0.00	100.00	182.94
96	**-12	1.00	549.2	218.00	13.55	6.00	81.65	1.00	200.00	98.53	184.69
97	**-1	1.00	549.2	221.00	13.45	10.00	63.25	0.00	0.00	98.76	186.56
98	**-2	1.00	550.0	272.00	12.13	7.00	75.59	0.00	0.00	85.26	188.29
99	**-3	1.00	549.2	240.00	12.91	11.00	60.30	0.00	0.00	91.13	190.07
100	**-4	1.00	549.2	253.00	12.57	6.00	81.65	0.00	0.00	94.05	191.82

2910 Fortune Circle West
Suite E
Indianapolis, IN 46241
www.biostorage.com

BioStorage Technologies

Fax

To:	US NRC Region III	**From:**	Angie Smith
Fax:	630-515-1078	**Pages:**	8 including cover page
Phone:		**Date:**	14 December 2011
Re:		**cc:**	

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

- **Comments:**

Please find our request to remove our former location from our NRC license attached.

Please confirm receipt of the Amendment Request via email to

Angie Smith

Quality Manager

angie.smith@biostorage.com