J-6
MS-16

August 19, 2015

Dennis Lawyer
Licensing Assistance Team
US Nuclear Regulatory Commission Region 1
2100 Renaissance Boulevard, Suite 100
King of Prussia, PA 19406-2713

Mail Control No. 588476
License No. 06-30460-01 03034773

Dear Mr. Lawyer,

In response to your letter dated August 10, 2015.

1. We would like to confirm that as of July 1, 2015 all radioactive materials possessed by Ambios Labs, Inc. have been removed from the facility. The copies of our disposal records and a completed NRC form 314 are attached.

2. There were no radioactive material spills or other unusual spreads of contamination in and around the facility during licensed activities. There are no restricted areas or areas of possible inaccessible contamination.

3. Copies of all other available requested records are attached.

Attachments:

1. NRC Form 314 Certificate of Disposition of Materials.
2. Tritium Disposition Form (The summary of distribution of tritium received, stored, disposed, and removed by Ambioslabs, Inc., 2007-2015).
3. Tritium Labeled Material Package Receipt and Processing Form, 2007-2015.
4. Tritium Labeled Material Package Shipment Form, 2007-2015.
5. Tritium Solid Waste Disposal Form, 2007-2015.
6. Tritium Sewer Disposal Form, 2007-2015.
7. Tritium LSC-Vials Disposal Form, 2007-2015.

Victor Sidorov, Ph.D.
CEO, RSO
Ambioslabs, Inc.
705 North Mountain Road, Room C-115-A
Newington, CT 06111

588476

NRC FORM 314
(02-2014)
10 CFR 30.36(j)(1); 40.42(j)(1); 70.38(j)(1); and 72.54(k)(5)(1)(1)

U.S. NUCLEAR REGULATORY COMMISSION

CERTIFICATE OF DISPOSITION OF MATERIALS

APPROVED BY OMB: NO. 3150-0028 EXPIRES: 02/28/2017

LICENSEE NAME AND ADDRESS	LICENSE NUMBER	DOCKET NUMBER
AMBIOSLABS, INC. 705 N. MOUNTAIN RD., R.C115-A NEWINGTON, CT 06111	06-30460-01	03034773
	LICENSE EXPIRATION DATE: September 30, 2019	

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:

☒ b. Disposal of radioactive materials:

☒ 1. Directly by the licensee:
SEWER DISPOSAL

☐ 2. By licensed disposal site:

☒ 3. By waste contractor:
PHILOTECHNICS, LTD

☒ 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: 08.01.2015 (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
VICTOR SIDOROV	CEO, RSO	8609530897	ambioslabs@ambioslabs.com

Mail all future correspondence regarding this license to: AMBIOSLABS, INC.
16 ELLEN RD. FARMINGTON CT 06032

C. CERTIFYING OFFICIAL

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

PRINTED NAME AND TITLE	SIGNATURE	DATE
VICTOR SIDOROV, CEO, RSO	V. Sidorov	08.19.2015

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.

AmBios Labs, Inc., **Radiation Safety**

Tritium Disposition Form

P. 1

1. This form should summarize distribution of tritium in various forms received, stored, disposed and removed by AmBios Labs, Inc.
2. The total amount of tritium on the premises should be summarized before receiving new tritium foils.
3. Total amount of tritium on the premises should not exceed 1.0 Ci

Date	Tritium on premises, mCi						Tritium removed from premises, mCi			Total tritium on premises mCi	Init.
2007	Foils	Received ^{3}H-compounds	Working	Cryo-Pump	Solid Waste	LS-Vials	Sewer	Shipped to Customers	Shipped to PEcoS		
06/01	0	0	28.54	0	900	23.139				951.679	VS Transf from Site
06/19	0	0	28.54	0	0	23.139			900.	51.679	VS
07/12	750	0	21.29	0	5.0	23.139		2.25		799.429	VS
08/14	0	0	15.7	15.0	0	24.129	4.5	0.1	740.	54.829	VS
08/24	750									804.829	VS
11/29		100.0 (NaB^3H_4)								904.829	VS
2008 01/28/08	0	0	6.52	0	10.0	24.654	8.15	15.505	840.	41.174	VS
02/15	0	125.0 (NaB^3H_4)								166.174	VS
04/08	0	10.00 (17-AA 6)								<176.174	VS
04/25	0	0.1 (SN56)								<176.274	VS
05/01	0	5.6 (17-A6)								<178.874	VS
05/22	0	125.0 (NaB^3H_4)								<303.874	VS
10/24	0	125.0 (NaB^3H_4)								<428.874	VS
01/23 2009	0	250.0 (NaB^3H_4)								<678.874	VS
02/23	0	200.0 (NaB^3H_4)								<878.874	VS
04/02	0	100.0 (NaB^3H_4)								<978.874	VS
03/10	0	0.4 (fNLP)								<979.274	VS

AmBios Labs, Inc., **Radiation Safety**

P.2

Tritium Disposition Form

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3. Total amount of tritium on the premises should not exceed 1.0 Ci

Date	Tritium on premises, mCi						Tritium removed from premises, mCi			Total tritium on premises mCi	Init.
2009	Foils	Received ^{3}H-compounds	Working	Cryo-Pump	Solid Waste	LS-Vials	Sewer	Shipped to Customers	Shipped to PEcoS		
11/03	0	0	68.5	0	740.	24.986	92.2	53.588		833.486	VS
2010			[illegible]			[illegible]				[illegible]	
01/18		25.0 (NaB^3H_4)								<858.	VS
02/04		50.0 (NaB^3H_4)								<908.	VS
03/16		50.0 (NaB^3H_4)								<958.	VS
05/26		25.0 (NaB^3H_4)								<983.	VS
06/27	0	0	19.9	0	830.	25.116	96.5	11.97		875.016	VS
06/29		100.0 (NaB^3H_4)								975.016	VS
07/23	0	0	60.1	0	860	25.116	18.8	10.0		945.216	VS
07/26	0	50 (NaB^3H_4)								995.216	VS
08/03	0	0	93.3	0	0	25.116	5.8	11.0	860.0	118.416	VS
08/06		100.0 (NaB^3H_4)								218.416	VS
09/24		100.0 (NaB^3H_4)								<318.416	VS
10/08		250.0 (NaB^3H_4)								<568.416	VS
12/16		100.0 (NaB^3H_4)								<668.	VS
12/21		100.00 (NaB^3H_4)								<768.	VS
2011 01/31	0	0	55.64	0	581.0	25.116	82.6	24.06	[illegible]	661.796	VS

0. VS

AmBios Labs, Inc., **Radiation Safety**

Tritium Disposition Form

p. 3

1. This form should summarize distribution of tritium in various forms received, stored, disposed and removed by AmBios Labs, Inc.
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3. Total amount of tritium on the premises should not exceed 1.0 Ci

Date	Tritium on premises, mCi						Tritium removed from premises, mCi			Total tritium on premises mCi	Init.
2011	Foils	Received ^{3}H-compounds	Working	Cryo-Pump	Solid Waste	LS-Vials	Sewer	Shipped to Customers	Shipped to PEcoS		
02/16		150.0 (NaB^3H_4)								<811.	VS'
02/25		100.0 (" ")								<911.	VS'
03/01								100.0		<811.	VS
03/04		100.0 (NaB^3H_4)								<911.	VS
03/17		100.0 (" ")					22.6	11.459		977.697	VS'
03/21			62.581	0	0	0.916			914.2	63.497	VS'
06/08		100.0 (NaB^3H_4)								<163.5	VS'
06/22		150.0 (NaB^3H_4)								<313.5	VS'
07/07		100.0 (NaB^3H_4)								<413.5	VS'
08/18		200.0 (NaB^3H_4)								<613.5	VS'
11/11		100.0 (NaB^3H_4)								<713.5	VS'
11/29		100.0 (NaB^3H_4)								<813.5	VS'
12/21			242.67	0	406.0	0.916	105.0	18.81		[illegible]	VS'
2012										689.57	VS
04/06		100.0 (NaB^3H_4)								<789.	VS'
04/05		100.0 (NaB^3H_4)								<889.	VS'
06/07		300.0 $NaBH_4$		0			187.1	0.12		997.57	VS'

AmBios Labs, Inc., **Radiation Safety**

Tritium Disposition Form

P.4

1. This form should summarize distribution of tritium in various forms received, stored, disposed and removed by AmBios Labs, Inc.
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3. Total amount of tritium on the premises should not exceed 1.0 Ci

Date	Tritium on premises, mCi					Tritium removed from premises, mCi				Total tritium on premises mCi	Init.
2012	Foils	Received ^{3}H-compounds	Working	Cryo-Pump	Solid Waste	LS-Vials	Sewer	Shipped to Customers	Shipped Solid Waste		
06/18						1.2	7.8	200.0		786.37	VS
07/05		200.0 ($NaBT_4$)					12.0			976.37	VS
07/24		60.17	0	0		VS 6.2	6.2		910.0	60.17	VS
07/25		100.0 ($NaBT_4$)								<160.17	VS
07/27		200.00 ($NaBT_4$)								<360.17	VS
08.17		200.00 ($NaBT_4$)								<560.17	VS
10.02		200.00 ($NaBT_4$)								<760.17	VS
11.28		100.00 $NaBT_4$								<860.17	VS
12/18	—	—	188.62	—	598.0	0.1	101.2	12.25	—	746.62	VS
2013											
02/26		200.0 (NaB^3H_4)								<946.62	VS
05/09		200.0 $NaBT_4$	98.32		648.5	0.1	148.7	10.0		986.82	VS
06.05	—	—	95.548	—	—		30.0	1,275	890.0	95.548	VS
2014											
05/28		300.0 $NaBT_4$								<395.548	VS
11/05		400.0 $NaBT_4$								<795.548	VS
12/02		250.0 $NaBT_4$								<900.0	VS

AmBios Labs, Inc., **Radiation Safety**

p.5

Tritium Disposition Form

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3. Total amount of tritium on the premises should not exceed 1.0 Ci

Date	Tritium on premises, mCi					Tritium removed from premises, mCi				Total tritium on premises mCi	Init.
2015	Foils	Received ^{3}H-compounds	Working	Cryo-Pump	Solid Waste	LS-Vials	Sewer	Shipped to Customers	Shipped Solid Waste		
03/02		2000 NABTV								<950.0	VS
04/14	-	-	151.63	-	-	0.02	667.5	264	4000	151.63	VS
05/05		100.0 NABTV								<251.63	VS
06.26.15	-	-	-	-	-	-	251.33	0.3	-	0	VS

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Receipt and Processing Form P.1

Date Received	Reference	Activity, mCi	mR/hr @ Surface	mR/hr @ 3 feet	Package Wipe Results, net dpm/100 sq cm	By
07/12/07	391715L	750.0	0.02	0.02	ext. 0 int. 0	VS
~~obsolete~~					ext. int.	
09/24/07	400385L	750.0	0.02	0.02	ext. 0 int. 0	VS
11/28/07	071126	100.0	0.02	0.02	ext. 0 int. 0	VS
02/15/08	071471	125.0	0.02	0.02	ext. 0 int. 0	VS
04/08/08	Infinity	10.0	0.02	0.02	ext. 0 int. 0	VS
04/25/08	OLEMISS	0.1	0.02	0.02	ext. 0 int. 0	VS
05/01/08	Infinity	5.6	0.02	0.02	ext. 0 int. 0	VS
~~05/20/08~~	~~Infinity~~	~~5.622~~	~~0.02~~	~~0.02~~	~~ext. 0 int. 30~~	~~VS~~ VS
05/22/08	72752	125.0	0.02	0.02	ext. 0 int. 30 VS	VS
10/24/08	080806	125.0	0.02	0.02	ext. 0 int. 40 VS	VS
01/23/09	08918	250.0	0.02	0.02	ext. 0 int. 80	VS
02/23/09	08/02/05	200.0	0.02	0.02	ext. 0 int. 40	VS
05/10/09	V. Michigan	0.4	0.02	0.02	ext. 0 int. 0	VS
04/02/09	080205	100.00	0.02	0.02	ext. 0 int. 80	VS
01/18/10	VT224	25.0	N/A	N/A	ext. 0 int. 0	VS
03/04/10	VT224	50.0	N/A	N/A	ext. 0 int. 0	VS
03/16/10	VT224	50.0	N/A	N/A	ext. 0 int. 0	VS
05/26/10	VT224	25.0	N/A	N/A	ext. 0 int. 0	VS
06/29/10	VT224	100.00	N/A	N/A	ext. 0 int. 0	VS
07/26/10	VT224	50.00	N/A	N/A	ext. 0 int. 0	VS
08/06/10	VT224	100.00	N/A	N/A	ext. 0 int. 10	VS
09/28/10	100827	100.00	N/A	N/A	ext. 0 int. 80	VS

1. Radioactive material packages must be processed within 3 hours of receipt.
2. The RSO must notify the manufacturer and the shipping agent if any of the following incidents occur:
   - The package is damaged
   - Removable contamination on the package is > 22,000 net dpm
   - External radiation level at the package surface is > 0.5 mR/hr

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Receipt and Processing Form P. 2

Date Received	Reference	Activity, mCi	mR/hr @ Surface	mR/hr @ 3 feet	Package Wipe Results, net dpm/100 sq cm	By
10/08/10	101006	250.0	N/A	NA	ext. 0 int. 40	VS
12/16/10	VT224	100.00	N/A	N/A	ext. 0 int. 0	VS
12/21/10	10/12/10	100.00	N/A	N/A	ext. 0 int. 30	VS
2011 02/16/11	VT224	150.00	N/A	N/A	ext. 0 int. 0	VS
02/25/11	110106	100.00	N/A	NA	ext. 0 int. 50	VS
03/04/11	VT225	100.00	N/A	N/A	ext. 0 int. 0	VS
03/17/11	110106	100.00	N/A	N/A	ext. 0 int. 40	VS
04/08/11	110106	100.00	N/A	NA	ext. 0 int. 20	VS
06/22/11	110621	150.00	N/A	N/A	ext. 0 int. 50	VS
07/07/11	VT224	100.00	N/A	N/A	ext. 0 int. 0	VS
08/18/11	VT224	200.00	N/A	N/A	ext. 0 int. 0	VS
11/11/11	VT224	100.00	N/A	NA	ext. 0 int. 0	VS
11/28/11	VT224	100.00	N/A	N/A	ext. 0 int. 0	VS
2012 04/04/12	VT224	100.00	N/A	N/A	ext. 0 int. 0	VS
05/08/12	VT224	100.00	N/A	N/A	ext. 0 int. 0	VS
06/07/12	VT224	300.00	N/A	N/A	ext. 0 int. 0	VS
07/05/12	VT224	200.00	N/A	N/A	ext. 0 int. 0	VS
07/25/12	ART853	100.00	N/A	N/A	ext. 0 int. 30	VS
07/27/12	MT1848	200.00	N/A	N/A	ext. 0 int. 0	VS
08/17/12	MT1848	200.00	N/A	N/A	ext. 0 int. 0	VS
10/02/12	MT1848	200.00	N/A	N/A	ext. 0 int. 0	VS
11/29/12	MT1848	100.00	N/A	N/A	ext. 0 int. 0	VS
					ext. int.	

200.0 VS

200.0 VS

1. Radioactive material packages must be processed within 3 hours of receipt.
2. The RSO must notify the manufacturer and the shipping agent if any of the following incidents occur:
   - The package is damaged
   - Removable contamination on the package is > 22,000 net dpm
   - External radiation level at the package surface is > 0.5 mR/hr

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Receipt and Processing Form P.3

Date Received	Reference	Activity, mCi	mR/hr @ Surface	mR/hr @ 3 feet	Package Wipe Results, net dpm/100 sq cm	By
2013					ext. int.	
02/26	MT1848	200.00	N/A	N/A	ext. 0 int. 0	VS
05/09	MT1848	200.00	N/A	N/A	ext. 0 int. 0	VS
2014					ext. int.	
05/29	MT1848	300.00	N/A	N/A	ext. 0 int. 0	VS
11/05	VT224	400.00	N/A	N/A	ext. 0 int. 0	VS
12/02	MT1848	250.00	N/A	N/A	ext. 0 int. 0	VS
2015					ext. int.	
03/12	MT1848	200.00	N/A	N/A	ext. 0 int. 0	VS
05/05	MT1848	100.00	N/A	N/A	ext. 0 int. 0	VS
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	
					ext. int.	

1. Radioactive material packages must be processed within 3 hours of receipt.
2. The RSO must notify the manufacturer and the shipping agent if any of the following incidents occur:
   - The package is damaged
   - Removable contamination on the package is > 22,000 net dpm
   - External radiation level at the package surface is > 0.5 mR/hr

AmBios Labs, Inc., **Radiation Safety**

Tritium Solid Waste Disposal Form

Date	Estimated Activity, mCi	Disposed by (Contractor)	Reference	Notes
06.19.2007	900.00	Perma-Fix Northwest Inc.	LLR07-060	VS
08/14/07	740.00	Perma-Fix Northwest Inc.	LLR07-086	VS
01.28.08	840.00	Perma-Fix Northwest Inc.	LLR08-014	VS
08/03/10	860.00	Philotechnics, Ltd.	1262-080310TX	VS
03/21/11	914.2 (*)	Philotechnics, Ltd	1262-032111TX	VS
07/24/12	910.00	Philotechnics, Ltd	07-24-12	VS
06.05.13	890.00	Philotechnics, Ltd.	06-05-13	VS
04.14.2015	400.00	Philotechnics, Ltd	04-14-15	VS

(*) 890.0 mCi Solid Waste, 24.2 mCi LSC-Vials

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Shipment Form

Date 2007	Sent to	Courier/ Air Waybill	Activity, mCi	Swipe Tests dpm@vial/ dpm/package	mR/hr @ surface	By
06/19	Perma-Fix N.W. Pasco, WA	Fedex 791325446178	900.0	0.07	0.02	VS
07/09	Dr. J. Jaquith Aegera Therap. Inc. Montreal, Canada	Fedex 8614 8744986	2.2	0	0.02	VS
07/10	P. Oscukowski Harvard C. Neurol. Dep. Boston, MA	Fedex 798172436031	0.05	0	0.02	VS
07/25	Dr. K. M Ching Univ. of Auckland, Auckland, NZ	Shenker 0861373 2014	0.1	0	0.02	VS
07/14	Perma-Fix N.W. Pasco, WA	Fedex 791365404750	740.0	0	0.02	VS
08/27	Dr. T. Johnson WIL Res. Labs Ashland, OH	Fedex 791748800874	1.07	0	0.02	VS
08/10	Radiation Safety Univ. of Mississippi University, MS	Fedex 7938672 0407	0.74	0	0.02	VS
10/15	Radiation Safety Univ. of Mississippi University, MS	Fedex 798206692138	0.225	0	0.02	VS
11/15	Isotopes Services Int. BRUSSELS, Belgium	Shenker JFK-11158522	1.14	0	0.02	VS
12/18	Rad. Protection Harvard Med. Sch. Boston, MA	FEDEX	0.21	0	0.02	VS
2008 01/07	Rad. Safety Procter & Gamble Cincinnati, OH	FEDEX 782498206608	0.12	0	0.02	VS
01/07	Dr. James Porter Infinity Pharm. Cambridge, MA	FEDEX 7826264671333	12.0	0	0.02	VS
01/28	Perma Fix Pasco, WA	7824 8526 7761	840.0	0	0.02	VS
04/15	B. Tillotson Infinity Pharm. Cambridge, MA	7820 3892 6048	6.27	0	0.02	VS
04/16	M. Alston, CSP GNF San Diego, CA	7884 2157 5146	0.155	0	0.02	VS

1. All measurements should be done prior shipment.
2. No shipment can go out if there is a surface contamination above background.

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Shipment Form p. 2

Date 2008	Sent to	Courier/ Air Waybill	Activity, mCi	Swipe Tests dpm@vial/ dpm/package	mR/hr @ surface	By
05/05	J. & E. Infinity Pharm. Cambridge, MA	7983 1900 4834	3.4	0	0.02	VS
05/07	Rad. Safety Univ. of Mississippi University, MS	7900 0852 7889	0.042	0	0.02	VS
05/20	Infinity Pharm. Inc. Cambridge, MA	7920 5929 6699	7.02	0	0.02	VS
06/02	Dr. G. Gunn, RSO Biological Test Center Irvine, CA	7984 5296 0408	5.02	0	0.02	VS
06/23	Japan Radioisot. Ass. Chiba, Japan	023- 1645 0821	0.125	0	0.02	VS
07/21	The Genomics Ist. of Novartis San Diego, CA	7984 8288 4368	0.62	0	0.02	VS
07/21	NCI-Frederick Frederick, MD	7988 8465 1551	0.132	0	0.02	VS
09/02	NCI-Frederick, Frederick, MD	7905 6803 5188	0.03	0	0.02	VS
09/29	J. & E. Infinity Pharm. Cambridge, MA	7911 4866 3258	6.27	0	0.02	VS
10/06	Dr. L. Abbott TAMU - Rad Safety College Station, TX	7911 5584 3644	0.16	0	0.02	VS
10/14	NCI-Frederick Frederick, MD	7903 9368 2246	1.31	0	0.02	VS
10/14	Dr. Smith Univ. of Michigan Ann Arbor, MI	7927 6961 5388	0.675	0	0.02	VS
11/03	NCI-Frederick Frederick, MD	7906 1903 5750	0.54	0	0.02	VS
11/07	Sven De Meyer Isotopes Serv. Intern. Brussels, Belgium	DHL Global 3KB7234	0.30	0	0.02	VS
11/07	Schuylkill Dr. Charles de Gaulle, France	DHL Global 3KB7237	0.10	0	0.02	VS

1. All measurements should be done prior shipment.
2. No shipment can go out if there is a surface contamination above background.

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Shipment Form p. 3

Date	Sent to	Courier/ Air Waybill	Activity, mCi	Swipe Tests dpm@vial/ dpm/package	mR/hr @ surface	By
12/02	GNF San Diego, CA	7971 5056 2181	0.125	0	0.02	VS
12/02	NCI-Frederick Frederick, MD	7971 5041 8447	0.057	0	0.02	VS
2009 02/02	NCI-Frederick Frederick, MD	7863 0571 7217	1.2	0	0.02	VS
02/24	GNF San Diego, CA	7863 7317 0260	0.24	0	0.02	VS
02/24	Infinity Pharm. Cambridge, MA	7863 7281 5487	8.64	0	0.02	VS
03/06	Japan R/I Assoc. CHIBA, Japan	023 1645 0843	0.125	0	0.02	VS
03/10	Univ. of Liverpool, Liverpool, UK	8676 6058 4230	2.3	0	0.02	VS
03/24	D. Smith Univ. of Michigan Ann Arbor, MI	7874 4386 2278	0.40	0	0.02	VS
04/07	G. Gum, RSO BTC Irvine, CA	7874 8541 8688	6.0	0	0.02	VS
04/28	Dr. F. Marceau Univ. Laval Sainte-Foy, Canada	8676 6058 4240	0.14	0	0.02	VS
05/04	Dr. K. Depew Infinity Pharm. Cambridge, MA	7875 6125 4874	0.25	0	0.02	VS
05/20	Kris Depew Infinity Pharm. Cambridge, MA	7866 8487 0501	0.40	0	0.02	VS
05/21	Dr. Jun Yu Johns Hopkins Baltimore, MD	7866 2808 5725	0.072	0	0.02	VS
07/14	NCI-Frederick Frederick, MD	7867 7491 5677	1.47	0	0.02	VS
2010 01/25	Dr. D. Smith Rad. Saf. / OSEH Ann Arbor, MI	7883 2873 1140	0.64	0	N/A	VS

1. All measurements should be done prior shipment.
2. No shipment can go out if there is a surface contamination above background.

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Shipment Form

Date 2010	Sent to	Courier/ Air Waybill	Activity, mCi	Swipe Tests dpm@vial/ dpm/package	By
02/23	Jennie Ge Intrinsic Pharm. Cambridge, MA.	7984 1526 5266	10.51	0/0	VS
03/22	Rad. Safety Section VCU, Richmond, VA	7933 7488 3391	0.12	0/0	VS
03/29	Sam Roberts Noble Found. Ardmore, OK	7885 1848 5632	0.7	0/0	VS
07/06	Rad. Saf. Dep. WVU, Morgantown, WV	7836 8867 5388	0.42	0/0	VS
07/20	Carrick D.M. Univ. of PA Philadelphia, PA.	7837 4402 0566	10.0	0/0	VS
07/27	Harvard Rad. Saf. Boston, MA	7888 5854 4228	7.5	0/0	VS
07/27	Carrick, DM. Univ. of Penn. Philadelphia, PA,	7837 6481 1676	3.5	0/0	VS
08/03	Philotechnics, LTD Ship.# 1262-080310	TX	860.0	0/0	VS
10/13	Rad. Safety Office NIH, Bethesda, MD	7863 3766 8872	1.0	0/0	VS
10/18	Hartmann Analyt. Hannover Airport/Germany	023-16450865	0.1	0/0	VS
11/01	Nat. Cancer Inst. Frederick, MD	7840 6855 7870	1.0	0/0	VS
2011 01/18	L. Grenier Intrinsic Pharm Cambridge, MA	7843 3008 7420	20.7	0/0	VS
02/08	Dr. D. Smith Univ. of Michigan Ann Arbor, MI	7967 3844 8537	0.57	0/0	VS
09/10/10	Nat. Cancer Inst. Frederick, MD	7938 0842 4070	1.26	0/0	VS 10/13/10

NB!

1. All measurements should be done prior shipment.
2. No shipment can go out if there is a surface contamination above background.

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Shipment Form D.5

Date 2011	Sent to	Courier/ Air Waybill	Activity, mCi	Swipe Tests dpm@vial/ dpm/package	By
03/01	ViTrax Placentia CA	7968 1870 0858	100.0	0/0	VS
03/09	E. O'Connell SUNY, Stony Brook, NY	7968 5740 8750	0.389	0/0	VS
03/17	L. Grenier, Infinity Ph. Cambridge, MA	7945 9882 9824	10.5	0/0	VS
03/21	Philotechnics, LTD. Ship.# 1262-032111TX	Solid Waste Scint. Vials	890.0 24.2	0/0 0/0	VS
04/11	RSO, Procter/Gamble Cincinnaty, OH	7946 3643 5624	0.56	0/0	VS
04/18	E. Hamel NCI-Frederik Frederick, MD	7970 0605 4181	1.4	0/0	VS
07/18	L. Grenier, Infinity Cambridge, MA	7873 1315 5485	6.45	0/0	VS
09/23	China Isotope Co. Beijing, China	10079 1655	0.5	0/0	VS
12/05	Infinity Pharm. Cambridge, MA	7954 7588 4210	10.0	0/0	VS
2012					
04/30	Hartman Analyt. Hannover Airport, GE	10079 1719	0.12	0/0	VS
06/18	ViTrax Placentia, CA	7936 9283 6020	200.0	0/0	VS
07/24	Philotechnics LTD.	Solid Waste pick-up	910.0	0/0	VS
08/06	L. Grenier, Infinity Cambridge, MA	7981 0296 4782	6.85	0/0	VS
08/30	Li Guoxiang China Isotope Co.	753075	1.5	0/0	VS

1. All measurements should be done prior shipment.
2. No shipment can go out if there is a surface contamination above background.

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Shipment Form D.6

Date	Sent to	Courier/ Air Waybill	Activity, mCi	Swipe Tests dpm@vial/ dpm/package	By
2012					
11/08	L. Grenier, Intinity Pharm. Cambridge, MA	7940 3322 6982	3.6	0/0	VS
11/19	SAIC-Frederick, Inc. Frederick, MD	7941 1032 6748	0.075	0/0	VS
12/03	—11—	7942 0371 3511	0.075	0/0	VS
12/04	—11—	7942 [illegible] 2835	1.15	0/0	VS
2013					
03/19	L. Grenier, Intinity Cambridge, MA	7993 1749 8693	10.0	0.0	VS
05/29	S. Gupta, ARC Inc. Saint Louis, MO	7998 7017 2120	0.275	0/0	VS
05/30	SAIC-Frederick, Inc. Frederick, MD	7998 8264 1301	1.0	0.0	VS
06/05	Philotechnics Oak Ridge, TN	Solid Waste Pickup	890.0	0/0	VS
2014					
06/18	UPENN, R. Eckenhoff Pennsilvania, PA	7703 4584 3670	15.75	0/0	VS
06/18	J. Cohen Harvard Radiation Safety Office, Boston, MA	7703 4569 1040	5.95	0.0	VS
07/09	West Virginia University Morgantown, West Virg.	FEDEX	0.2	0/0	VS
07/14	Li Guoxiang China Isotope Co.	World Courier	0.5	0/0	VS

1. All measurements should be done prior shipment.
2. No shipment can go out if there is a surface contamination above background.

AmBios Labs, Inc., **Radiation Safety**

Tritium Labeled Material Package Shipment Form

P. 7

Date 2015	Sent to	Courier/ Air Waybill	Activity, mCi	Swipe Tests dpm@vial/ dpm/package	By
02.02	University of Manitoba Winnipeg, Canada	9676 6058 4251	2.0	0/0	VS
02.03	Univ of Mississippi, University, MS	7728 6186 4014	1.0	0/0	VS
04.08 VS ~~03.04~~	R/S Univ of Mississippi University, MS	7733 1607 4864	1.0	0/0	VS
05.20	UPENN Philadelphia, PA	7736 4754 6027	0.1	0/0	VS
05.20	ITRC St. Louis, MO	7736 4308 3034	0.2	0/0	VS

1. All measurements should be done prior shipment.
2. No shipment can go out if there is a surface contamination above background.

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

D.1

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 480 l/day (avg.)

Total activity allowed to sewer disposal: ≤ 4.8 mCi/day

2009
630 l/day
≤ 6.3 mCi/day

	Disposal Date	Activity mCi	Volume ml	Remarks
2007	07/15	1.2	1,800	VS'
	07/17	0.5	1,400	VS'
	07/27	0.5	2,000	VS'
	08/01	0.4	1,500	VS'
	08/13	1.9	3,200	VS'
	(07/15 - 08/13) Σ = 4.5mCi			
	09/30	1.0	2,200	VS'
	10/07	1.0	1,400	VS'
	10/21	1.2	1,500	VS'
	10/28	2.2	3,200	VS'
	12/08	1.4	1,500	VS'
2008				
	01/16	0.2	4,000	VS'
	01/16	1.0	2,500	VS'
	01/21	0.5	1,500	VS'
	(08/30 - 01/21/08) Σ = 8.5mCi			
	02/20	0.4	1,900	VS'
	03/12	1.9	2,700	VS'
	03/14	4.0	3,500	VS'
	03/16	4.0	3,500	VS'
	05/26	1.7	2,000	VS'

Disposal Date	Activity mCi	Volume ml	Remarks
07/17	3.5	1,800	VS'
07/19	3.5	4,500	VS'
07/26	2.5	2,500	VS'
08/24	4.0	2,500	VS'
08/26	3.0	1,000	VS'
11/27	0.5	1,800	VS'
12/05	4.0	2,500	VS'
12/24	4.0	2,800	VS'
2009			
01/31	1.5	1,500	VS'
02/01	3.5	4,200	VS'
02/15	0.5	1,500	VS'
02/18	4.0	4,000	VS'
02/19	2.0	3,400	VS'
02/24	2.0	3,000	VS'
03/04	0.8	1,500	VS'
03/06	3.0	1,500	VS'
03/07	3.5	3,500	VS'
03/10	4.0	3,000	VS'
05/30	1.5	2,500	VS'
06/20	2.5	2,500	VS'
06/21	3.5	2,500	VS'
06/28	1.5	1,800	VS'

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form P.2

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 630 l/day (avg.)

Total activity allowed to sewer disposal: 6.3 mCi/day

Disposal Date	Activity mCi	Volume ml	Remarks	Disposal Date	Activity mCi	Volume ml	Remarks
2008				2010			
06/28	5.0	3,000	VS'	03/23	5.6	4,000	VS
07/11	2.7	2000	VS	03/24	3.0	1.8	VS
07/18	4.5	2,600		03/25	4.5	3.8	VS
07/20	4.5	3,500	VS	04/06	6.0	3.5	VS
10/25	0.8	1,200	VS	05/27	5.0	3.3	VS
[02/20/08 ÷ 10/25/08] Σ = 92.2 mCi				05/28	4.0	1.8	VS
				06/18	5.0	2.9	VS
11/10	2.7	1,800		06/23	5.0	2.5	VS
11/12	3.8	2.500	VS	06/24	1.0	1.5	VS
12/03	4.2	2.800	VS	06/25	4.0	3.5	VS
12/12	3.2	2.800	VS	[01/21/10 ÷ 06/25/10] Σ = 96.5 mCi			
2010							
01/21	5.5	3.100	VS	07/01	4.0	1.5	VS
01/23	4.7	4.000	VS	07/02	4.0	1.5	VS
02/11	4.2	3.000	VS	07/06	2.0	1.8	
02/13	4.0	3.000	VS	07/13	4.5	2.7	VS
02/18	3.0	1.600	VS	07/17	2.3	1.8	VS
02/18	2.5	2.000	VS	07/18	3.0	2.5	VS (18.8)
03/08	4.7	2,500	VS	07/26	2.7	2.0	VS
03/09	4.5	2700	VS	07/28	3.1	2.5	VS 5.8
03/12	2.4	1.800	VS	[07/01/10 ÷ 07/28/10] Σ = 25.6 mCi			
03/14	4.0	2.800					

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

P. 3

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 630 l/day (avg.)

Total activity allowed to sewer disposal: 6.3 mCi/day

Disposal Date	Activity mCi	Volume ml ℓ	Remarks	Disposal Date	Activity mCi	Volume ml ℓ	Remarks
08/07/10	1.2	1.5	VS'	01/18	1.0	1.5	VS'
08/13/10	3.2	4.5	VS'	01/20	3.7	2.5	VS'
08/24/10	2.7	1.8	VS'	01/30	4.5	2.8	VS'
08/09/10	4.2	4.5	VS'	01/31	4.5	3.1	VS'
08/10/10	1.5	1.7	VS'	(08/07/10 ÷ 01/31/11) Σ = 82.6mCi			
08/15/10	1.5	2.2	VS'				
08/28/10	5.3	4.5	VS'	02/18	2.7	1.5	VS'
08/30/10	1.2	1.5	VS'	02/19	3.1	2.5	VS'
10/18/10	2.5	2.0	VS'	03/01	1.5	1.7	VS'
10/27/10	1.0	2.0	VS'	03/05	4.0	2.8	VS'
10/28/10	4.5	3.8	VS'	03/06	1.8	1.2	VS'
11/07/10	3.5	3.0	VS'	03/11	5.7	4.0	VS'
11/08	2.8	3.0	VS'	03/13	2.8	2.5	VS'
11/11	4.2	3.5	VS'	03/16	1.0	1.5	VS'
11/12/10	5.5	4.0	VS'	(02/18 ÷ 03/16) Σ = 22.6mCi			
11/13/10	1.0	1.5	VS'				
11/30	6.2	3.8	VS'	04/27	3.0	1.8	VS'
12/06/10	3.7	3.5	VS'	04/28	3.0	2.0	VS'
12/07/10	2.2	2.0	VS'	04/30	5.5	2.2	VS'
12/21	4.3	3.5	VS'	05/01	1.8	1.5	VS'
12/25	3.6	2.7	VS'	05/14	4.0	2.5	VS'
2011 01/06	1.8	3.0	VS'	06/20	4.5	2.5	VS'
01/18	1.3	1.5	VS'	06/21	4.3	1.5	VS'

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form P.4

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 630 l/day (avg.)

Total activity allowed to sewer disposal: 6.3 mCi/day

Disposal Date	Activity mCi	Volume ml/l	Remarks	Disposal Date	Activity mCi	Volume ml/l	Remarks
05/14	2.8	1.5	VS	11/21	1.0	1.0	VS
05/15	6.0	3.0	VS	11/22	1.5	1.0	VS
05/16	1.5	1.0	VS	11/30	3.8	2.5	VS
05/30	2.8	2.0	VS	12/02	3.0	1.5	VS
06/27	4.0	2.3	VS	12/20	0.5	1.0	VS
06/30	1.5	1.5	VS	(04/27/11 – 12/20/11)			
07/11	3.5	2.0	VS	Σ = 105.0 mCi			
07/17	4.2	2.5	VS	2012			
08/01	1.0	1.0	VS				
08/03	1.0	1.5	VS	01/07	2.2	1.1	VS
08/07	5.5	2.5	VS	01/11	2.0	1.0	VS
08/09	4.7	2.5	VS	01/12	4.5	3.0	VS
08/15	3.3	2.0	VS	02/03	3.0	3.0	VS
08/16	4.0	1.8	VS	02/04	3.2	1.5	VS
08/18	3.5	2.5	VS	02/06	1.0	1.0	VS
08/27	1.0	1.2	VS	02/08	4.0	2.5	VS
08/30	1.0	1.0	VS	02/11	1.0	0.8	VS
10/10	2.5	2.5	VS	02/12	3.5	3.0	VS
10/12	1.5	1.0	VS	02/17	2.0	1.5	VS
10/23	1.0	1.5	VS	02/18	4.1	2.5	VS
10/24	3.3	2.0	VS	02/18	2.5	1.6	VS
11/15	5.5	4.0	VS	02/18	1.8	1.5	VS
11/16	4.0	2.5	VS	02/20	4.0	2.0	VS

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

P.5

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 630 l/day (avg.)

Total activity allowed to sewer disposal: 6.3 mCi/day

2012

Disposal Date	Activity mCi	Volume ml	Remarks	Disposal Date	Activity mCi	Volume ml	Remarks
02/26	4.2	3.5	VS	04/04	4.0	2.200	VS
02/28	2.2	1.5	VS	04/05	1.0	0.5	VS
03/10	6.0	4.3	VS	04/06	1.5	1.000	VS
03/11	5.5	4.0	VS	04/07	0.5	1.000	VS
03/15	3.3	1.5	VS	04/08	5.5	4.000	VS
03/15	1.8	1.5	VS	04/09	5.1	3.000	VS
03/17	2.5	2.0	VS	04/10	5.1	3.000	VS
03/18	5.0	3.0	VS	04/15	4.8	2.500	VS
03/18	4.1	3.0	VS	04/16	4.5	2.500	VS
03/19	1.5	1.0	VS	04/17	3.8	1.800	VS
03/20	4.2	1.0	VS	04/25	3.5	1.500	VS
				04/27	4.0	2.000	VS
01/07 - 03/20				05/01	3.7	1.800	VS
= 76.1 mCi				05/05	4.5	2.000	VS
				05/06	1.5	1.000	VS
03/25	1.0	0.5	VS	05/09	3.2	2.000	VS
03/26	1.0	0.5	VS	05/10	3.2	1.800	VS
03/26	2.5	1.5	VS	05/11	4.8	2.500	VS
03/26	1.5	1.0	VS	05/12	5.5	3.000	VS
03/29	1.0	0.5	VS	05/13	5.5	2.800	VS
03/30	1.0	0.5	VS	05/16	1.5	1.000	VS
04/01	0.5	1.0	VS	05/18	5.0	3.000	VS
04/03	1.5	1.0	VS	05/20	5.2	3.000	VS

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

P.6

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 630 l/day (avg.)

Total activity allowed to sewer disposal: 6.3 mCi/day

2012

Disposal Date	Activity mCi	Volume ℓ	Remarks
05/27	1.5	1.0	VS'
05/28	4.8	3.5	VS
06/01	3.8	2.0	VS
06/02	5.0	3.8	VS
06/05	3.0	1.5	VS
06/06	5.8	4.0	VS'
05/25 ÷ 06/06 Σ = Σ = 121.0mCi			
06/12	2.2	2.5	VS'
06/14	1.8	2.0	VS
06/17	5.0	4.5	VS
06/12 ÷ 06/18 Σ 9.0mCi			
06/18	1.2	1.5	VS
06/25	3.2	3.0	VS
06/25	1.8	1.8	VS'
07/01	2.8	3.0	VS
07/04	3.0	3.0	VS'
06/18 ÷ 07/04 Σ 12.0mCi			

Disposal Date	Activity mCi	Volume ℓ	Remarks
07/18	1.5	2.0	VS'
07/21	1.5	1.5	VS
07/23	3.2	2.5	VS
07/18 ÷ 07/23 Σ 6.2mCi			
08/11	5.5	3.0	VS
08/12	1.5	1.5	VS'
08/13	2.7	2.0	VS
08/16	3.0	2.5	VS'
08/17	3.0	1.8	VS'
08/21	4.4	2.0	VS
08/22	3.2	2.0	VS
08/23	1.0	1.5	VS
08/28	3.8	2.0	VS'
08/30	3.0	2.0	VS'
09/02	1.8	1.5	VS
09/03	4.0	3.0	VS'
09/09	3.8	2.0	VS
09/4	5.8	3.0	VS'
08/11 ÷ 09/11 Σ 46.5mCi			

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

P.7

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 630* l/day (avg.)

Total activity allowed to sewer disposal: 6.3 mCi/day

Disposal Date	Activity mCi	Volume ~~ml~~ l	Remarks	Disposal Date	Activity mCi	Volume ~~ml~~ l	Remarks
08/15	3.0	2.0	VS	12/25	3.0	1,500	VS'
08/16	1.0	1.5	VS	12/27	3.0	2,000	VS
08/17	0.5	1.5	VS'	2013			
08/26	3.2	2.0	VS	01/18	1.5	1.0	VS'
08/30	3.5	2.0	VS	01/19	3.3	2.0	VS'
10/08	4.5	1.0	VS	01/24	4.5	4.8	VS'
10/08	1.5	1.2	VS'	01/25	1.8	0.5	VS'
10/18	4.0	2.8	VS	01/31	3.4	1.2	VS
10/25	3.7	3.0	VS	02/02	3.0	1.5	VS"
10/26	1.0	1.2	VS'	02/14	5.5	3.0	VS
11/03	3.3	2.5	VS'	02/15	2.0	1.5	VS
11/10	5.5	3.0	VS'	02/22	3.8	3.0	VS'
11/11	1.5	2.0	VS'	02/24	1.8	1.0	VS'
11/12	3.7	2.0	VS'	02/24	1.5	1.0	VS
11/29	2.5	1.8	VS	02/27	5.0	3.2	VS'
11/30	4.2	3.5	VS'	02/28	5.0	4.0	VS
12/05	1.5	1.0	VS	03/01	3.5	1.5	VS'
12/05	3.4	2.0	VS	03/02	2.2	1.0	VS'
12/16	2.2	1.7	VS	03/03	3.7	2.0	VS'
12/18	4.1	3.5	VS'	03/05	4.8	3.0	VS
08/15 ÷ 12/18 = 54.8				03/06	1.3	0.5	VS
				03/08	6.0	2.5	VS
				03/10	3.5	2.0	VS'

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

P. 8

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 600 l/day (avg.)

Total activity allowed to sewer disposal: 6.0 mCi/day

2013

Disposal Date	Activity mCi	Volume ~~ml~~ ℓ	Remarks	Disposal Date	Activity mCi	Volume ~~ml~~ ℓ	Remarks
03/11	4.3	3.5	VS	05/10	3.4	2.0	VS
03/12	3.0	1.5	VS	05/14	2.2	3.2	VS
03/18	2.5	1.5	VS	05/15	3.0	3.2	VS
03/18	4.7	2.8	VS	05/17	5.1	3.2	VS
03/24	1.8	1.0	VS	05/25	1.8	3.2	VS
03/27	6.0	2.5	VS	05/26	4.0	3.2	VS
03/28	6.0	2.5	VS	05/30	2.8	3.2	VS
03/28	1.5	1.0	VS	06/01	4.3	3.2	VS
04/01	6.0	2.5	VS	06/03	3.2	3.2	VS
04/02	6.0	2.5	VS	06/04	0.2		VS
04/03	1.5	1.0	VS		300.		VS
04/17	4.4	2.5	VS	08/14	3.3	3.2	VS
04/18	2.5	1.5	VS	08/15	3.2	3.2	VS
04/22	2.2	1.8	VS	05/21	1.0	3.2	VS
04/26	4.3	3.0	VS	08/22	4.2	3.2	VS
05/01	3.3	1.8	VS	08/23	3.8	3.2	VS
05/02	5.5	2.5	VS	2014			
05/07	1.5	1.5	VS				
05/08	5.7	2.8	VS	01/31	1.5	3.2	VS
05/08	4.0	3.0	VS	02/01	1.5	3.2	VS
			TVS.8	02/16	1.5	3.2	VS
				02/17	5.0	3.2	VS
				02/18	1.8	3.2	VS

201

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

D.B

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 580 l/day (avg.)

Total activity allowed to sewer disposal: 5.8 mCi/day

Disposal Date 2014	Activity mCi	Volume L	Remarks	Disposal Date	Activity mCi	Volume L	Remarks
03/01	3.2	3.2	VS	05/28	3.5	3.2	VS
03/10	4.0		VS	05/31	3.0		VS
03/11	2.5		VS	06/10	4.0		VS
03/16	4.0		VS	06/11	4.0		VS
03/17	2.8		VS	06/12	4.0		VS
03/18	4.1		VS	06/13	4.0		VS
03/20	2.7		VS	06/15	4.8		VS
03/30	4.0		VS	06/16	4.5		VS
04.01	3.6		VS	06.20	3.8		VS
04.07	3.0		VS	06/21	4.3		VS
04/12	2.0		VS	06/22	1.8		VS
04/15	5.2		VS	06/24	4.0		VS
04/22	4.5		VS	06/27	4.0		VS
04/28	3.7		VS	06/30	3.0		VS
04/28	4.5		VS	07/01	3.5		VS
04/30	3.8		VS	07/02	3.8		VS
05/01	4.3		VS	07/05	4.8		VS
05/04	3.8		VS	07/07	4.2		VS
05/06	4.7		VS	07.09	4.5		VS
05/07	4.8		VS	07.10	3.5		VS
05/25	3.5		VS	07/11	3.5		VS
05/27	3.5		VS	07/12	4.8		VS
05/28	3.5	↓	VS	07/16	4.0	↓	VS

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

P.10

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 580 l/day (avg.)

Total activity allowed to sewer disposal: 5.8 mCi/day

Disposal Date 2014	Activity mCi	Volume L	Remarks	Disposal Date	Activity mCi	Volume L	Remarks
07/21	4.7	3.2	VS'	08/28	4.4	3.2	VS'
07/22	4.1		VS'	09/29	1.8		VS'
07/28	4.5		VS'	09/30	5.0		VS'
07/30	4.2		VS'	10/06	3.8		VS'
08/01	4.8		VS'	10/07	5.2		VS'
08/03	4.0		VS'	10/10	4.6		VS'
08/08	4.5		VS'	10/11	3.6		VS'
08/09	4.8		VS'	10/12	4.9		VS'
08/14	3.0		VS'	10/14	4.7		VS'
08/15	4.0		VS'	10/16	4.1		VS'
08/18	4.8		VS'	10/17	3.5		VS'
08/19	4.8		VS'	10/21	5.1		VS'
08/21	4.2		VS'	10/23	4.7		VS'
08/22	4.2		VS'	10/28	2.1		VS'
08/29	3.0		VS'	10/29	2.1		VS'
08/30	4.0		VS'	10/30	4.8		VS'
09/11	5.0		VS'	10/31	5.0		VS'
09/12	3.4		VS'	11/06	3.9		VS'
09/14	3.8		VS'	11/07	4.9		VS'
09/16	5.1		VS'	11/11	3.3		VS'
09/18	2.2		VS'	11/12	4.8		VS'
09/24	4.6	↓	VS'	11/13	3.6		VS'
09/25	4.6		VS'	11/14	4.9	↓	VS'

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

P.11

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 540 l/day (avg.)

Total activity allowed to sewer disposal: 5.8 mCi/day

Disposal Date 2014	Activity mCi	Volume L	Remarks	Disposal Date	Activity mCi	Volume L	Remarks
11/16	3.8	3,2	VS'	2015		3,2	
11/18	4.8		VS	01/08	4.0		VS
11/19	3.4		VS	01.09.	4.0		VS
11/20	5.0		VS	01/10	3.8		VS
11/25	5.0		VS	01/11	4.0		VS
11/26	5.0		VS	01/13	2.1		VS
11/28	3.5		VS	01/15	4.8		VS
11/30	4.7		VS	01/17	4.8		VS
12/07	4.2		VS	01/18	3.0		VS
12/08	4.5		VS	01/21	5.2		VS
12/10	5.0		VS	01/22	5.0		VS
12/11	3.5		VS	01/23	4.0		VS
12/15	4.7		VS	01/25	3.8		VS
12/18	4.7		VS	01/26	4.7		VS
12/21	3.8		VS	01/28	5.2		VS
12/27	4.8		VS	01/30	2.7		VS
12/24	4.3		VS	01/31	4.5		VS
12/26	4.5		VS	02/03	3.9		VS
12/28	3.8		VS	02/03	5.0		VS
12/30	5.0		VS'	02/05	4.8		VS'
				02/08	3.5		VS
				02/10	4.5		VS
				02/11	5.3		VS

(08.14.13 ÷ 12.30.14) Σ = 476.1 mCi

(88.1)

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

p. 12

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 620 l/day (avg.)

Total activity allowed to sewer disposal: 6.2 mCi/day

Disposal Date 2015	Activity mCi	Volume l	Remarks	Disposal Date	Activity mCi	Volume l	Remarks
02/12	5.1	3.2	VS	04.14	5.5	3.2	VS'
02/17	5.0		VS	04.15	6.0		VS'
02/18	4.0		VS'	04/18	6.0		VS'
02/23	4.0		VS	04/19	4.8		VS
02/24	5.3		VS	04/20	5.8		VS
02/26	5.0		VS	04/21	5.5		VS
03/03	5.5		VS'	04/22	5.5		VS
03.04	5.5		VS	04/25	5.5		VS
03/13	5.8		VS'	4/26	6.0		VS'
03/20	5.0		VS	4/27	6.0		VS
03/22	5.5		VS'	4/28	4.5		VS
03.23	5.0		VS'	4/29	5.0		VS
03.26	5.6		VS'	05/01	5.8		VS
03.28	4.8		VS	05/02	6.1		VS'
03.30	5.5		VS	05/03	6.0		VS
03/31	5.5		VS'	5.04	6.0		VS
04/02	5.0		VS	5.05	5.8		VS
04/06	5.7		VS	6/01	5.0		VS
04/10	5.5		VS'	6/02	6.0		VS
04/13	4.0		VS'	6/03	6.0		VS
				6/04	6.0		VS'
08.14.13 ÷ 04.13.15 = 667.5 mCi				6/05	6.0		VS

102.3

133.8

AmBios Labs, Inc., **Radiation Safety**

Tritium Sewer Disposal Form

D.13

The liquid must be mixable with water and must have a pH between 6.0 and 10.0
Record all requested information below with each sink disposal. Activity should be recorded to the nearest 0.01 mCi
Monthly average concentration of tritium should not exceed 0.01 mCi/l

Total fluid discharge from bldg. to sewer: 620 l/day (avg.)

Total activity allowed to sewer disposal: 6.2 mCi/day

Disposal Date	Activity mCi	Volume l	Remarks		Disposal Date	Activity mCi	Volume l	Remarks
06/07	6.0	3.2	VS'					
6/08	6.0		VS'					
6/09	5.8		VS'					
6/10	6.0		VS'					
06/11	6.0		VS'					
06.12	6.0		VS'					
06.13	6.0		VS'					
06/14	6.0		VS					
06/15	6.0		VS					
06/16	6.2		VS'					
06/17	6.0		VS'					
06/18	6.0		VS'					
06/19	6.0		VS'					
06/20	4.5		VS'					
06/21	6.0		VS'					
06/22	6.0		VS'					
06/23	6.0		VS					
06/24	6.0		VS					
06/25	6.0		VS					
06/26	6.0		VS'					
06/27	6.0		VS'					
06/28	3.03	✓	VS					
Σ(04.14.15 ÷ 06.28.15)=251.33 mCi								

AmBios Labs, Inc., **Radiation Safety**

Tritium LSC-Vials Disposal Form

Use a biodegradable and/or environmentally safe fluor.

Collect of LSC-vials into 5 gal container; place only capped vials into the container.

Record information requested below with each disposal.

Disposal Date	Approx. Activity µCi	Approx. Weight gram	Tritium content µCi per gram	Disposed as	Initial
03.21.2011	24,200	150,000	0.16	Photolech. Gel	VS'
06.18.2012	1,200	35,000	0.034	Non-RA Waste	VS'
12.18.2012	100	8,000	0.013	Non-RA Waste	VS'
05.03.2013	100	10,000	0.01	Non-RA Waste	VS'
04.14.2015	10.0	3,000	0.003	Non-RA-Waste	VS'