

March 27, 2007

03036603

CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Division of Nuclear Materials Safety U.S. Nuclear Regulatory Commission Region I 475 Allendale Road King of Prussia, PA 19406 L-4

Subject:

Final Site Survey & NRC Form 314

USNRC License No. 37-30924-01

TetraLogic Pharmaceuticals (Formerly Gentara)

365 Phoenixville Pike Facility IES Project No. EHS07564.02

To Whom It May Concern:

Pursuant to the Notification of Decommissioning sent January 19, 2007 TetraLogic Pharmaceuticals (TetraLogic) formerly Gentara Corporation (Gentara) has vacated the 365 Phoenixville Pike facility to move within the same building to a larger laboratory facility located at 343 Phoenixville Pike, Malvern, Pennsylvania.

A License Amendment request to add the 343 address to the existing materials license was sent under separate cover on March 8, 2007. The purpose of this correspondence is to provide the Final Site Survey for the 365 Phoenixville Pike Facility as well as a completed NRC Form 314.

Please note, we do not wish to terminate the license. Rather we plan to remove the 365 Phoenixville Pike address and add the 343 Phoenixville Pike address.

The 365 Phoenixville Pike facility operated under Standard Industrial Classification (SIC) Code 8731 – Research and Development. Only ³H was used at the 365 Phoenixville Pike address and the quantities used were minimal. In the attached Final Site Survey we strove to document that the 365 Phoenixville Pike address is free from contamination and should be released for unrestricted use. Upon confirmation of the above, we request that the NRC remove the 365 Phoenixville Pike address from License 37-30924-01.

Should you have any questions regarding the above or attached material, please do not hesitate to contact Ms. Jessica Leonard, IES Engineer; our Radiation Safety Consultant at 610-828-3078 or me.

Sincerely,

Mark. McKinlay, PhD Chief Scientific Officer

cc:

S. Chunduru, TetraLogic

J. Leonard, IES

140582

RADIOLOGICAL DECOMISSIONING FINAL SURVEY REPORT

PREPARED FOR: TETRALOGIC PHARMACEUTICALS 365 PHOENIXVILLE PIKE FACILITY

IES PROJECT NO. EHS07564.02

March 2007

This report submitted by:

This report reviewed by:

Jessica B. Leonard lel

Jessica B. Leonard Senior Environmental & Safety Engineer George S. Petroka lel

George S. Petroka, CIH, CSP, RBP Director, BioPharma/EHS Services

TABLE OF CONTENTS

1.0	Background Information									
2.0	Site Inform	nation	1							
	2.1 Sit	2.1 Site History & Description								
		e Conditions at Time of Final Survey	2							
		entity of Potential Contaminants and Release Guidelines	2 2							
3.0	Site Maps		3							
4.0	Final Statu	us Survey Overview	3							
	4.1 Su	rvey Objectives	3							
	4.2 Or	ganization and Responsibilities								
	4.3 Ins	strumentation	4							
	4.4 Su	rvey Procedures	4 4							
		4.1 Area Classification	4							
	4.5 Da	ata Interpretation	5							
	4.6 Re	ecords	5							
5.0	Radioactiv	ve Inventory and Waste Records	5							
6.0	Summary		6							
		TABLES								
Table	e 1: Acceptal	ble Surface Contamination Levels	3							
		ATTACHMENTS								
ATT	ACHMENT	A SURVEY MAPS & WIPE RESULTS – ALL AREAS (INCLUDES PRINTOUTS)	LSC							
ATT	ACHMENT	B RADIOACTIVE WASTE DISPOSAL MANIFESTS								
ATT	ACHMENT	C CERTIFICATE OF DISPOSITION OF MATERIALS								

1.0 BACKGROUND INFORMATION

TetraLogic Pharmaceuticals (TetraLogic) operates a pharmaceutical research company in a leased facility in Malvern, Pennsylvania. Research activities include medicinal chemistry, biology, and corresponding administration. TetraLogic is moving from their 365 Phoenixville Pike to a larger laboratory facility located at 343 Phoenixville Pike in Malvern, Pennsylvania. A notification of Decommissioning letter was sent to the NRC on January 19, 2007.

TetraLogic retained IES Engineers (IES) to document the site decommissioning. TetraLogic moved from the 365 facility at the end of January 2007. TetraLogic plans to obtain release of the 365 address for unrestricted use and to add the new address to their Material License (License No. 37-30924-01.)

The purpose of this report is to summarize the methods and results of the Final Survey to ensure compliance with NRC regulations pertaining to Decommissioning of a Research and Development facility with a U.S. Nuclear Regulatory Commission (NRC) Material License. The intent of this survey is to show that the 365 Phoenixville Pike facility can be released for unrestricted use and is thereby acceptable for subsequent renovation by the landlord and future use by a new tenant.

2.0 SITE INFORMATION

2.1 Site History & Description

The 365 Phoenixville Pike facility consists of roughly 4,000 square feet and is located in a one story multi-tenant building. The facility consists of a main one-story building that houses both office and laboratory space. (A site plan is located in Section 3.0.)

Research activities at the facility, which have now ceased, typically occurred 12 hours a day, five days per week. An average of 17 employees worked at the facility in 2006; less in 2004 and 2005. Facility security was achieved by requiring card access to the site 24 hours a day, seven days a week.

The facility primarily operated under Standard Industrial Classification (SIC) Code 8731, Commercial Physical & Biological Research. The purpose of the research was primarily to discover, develop and commercialize innovative cancer treatments. Research and development the three on-site laboratories, but the use of Radioactive Material (RAM) was limited to the licensed areas of the Biology lab and adjacent lab corridor. RAM waste was stored in a secured cabinet in the Biology lab. No construction or modifications were made to the restricted areas at TetraLogic during the term of the license. As stated in the notification RAM had not been used onsite since J As of January 31, 2007 licensed activities at this address, including decommissioning activities ceased.

TetraLogic operates under U.S. Nuclear Regulatory License No. 37-30924-01with an expiration date of January 18, 2007. The Radiation Safety Officer (RSO), Srinivas Chunduru, Ph.D., presently maintains NRC-required records. IES, with the help of TetraLogic staff, managed all radiological decommissioning records.

The facility is a one-story structure. TetraLogic occupied the entire 365 address and limited the use of radioactive materials to the Biology Lab and adjacent service corridor.

The 365 facility consists of modern labs with durable, easily cleaned floors and work surfaces, and proper ventilation. Chemical fume hoods are available. Shielding materials of plastic, glass, metal and lead are available as are shielded storage containers. The standard assortment of incubators, centrifuges, drying ovens, and electrophoresis equipment used in a modern laboratory are also available.

There were no spills or contamination events at the TetraLogic 365 site that resulted in fixed contamination or where there was reason to believe that contaminants may have spread to inaccessible areas. Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning were not required for this facility or license.

2.2 Site Conditions at Time of Final Survey

TetraLogic was governed by and followed its US NRC Materials License. Mr. John Nicholson and Ms. Farrah Gaskins of the NRC audited TetraLogic at the 365 facility on May 24, 2005. TetraLogic had established a solid recordkeeping, labeling and training program prior to the audit and there were no violations.

Due to the end of the study involving radiation use, TetraLogic discontinued the use of radioactive materials at the facility in July 2004 and at that time performed decommissioning and contamination surveys.

Despite the previous surveys, in January 2007 TetraLogic performed an additional contamination survey and decontamination in the lab where radioactive materials were used. The survey included laboratory equipment and supporting fixtures. All RAM use equipment was appropriately surveyed and cleaned/decommissioned using Radcon or a similar agent. No contamination (fixed or otherwise) was found.

2.3 Identity of Potential Contaminants and Release Guidelines

The only isotope used on-site was ³H. The total quantity possessed during use was 50 uCi. Although TetraLogic is licensed for, ¹⁴C, ³³P, ³²P and ³⁵S research never required their use at the 365 facility. As is common in R&D facilities, RAM was ordered in small (0.5-2) millicurie amounts and then used in microcurie amounts. RAM was used at the 365 address from 9/22/2004 until 5/1/2005.

Based on these potential contaminants, NUREG 1757 and on the look-up table printed in 63 FR 64132 on November 18, 1998 "Acceptable License Termination Screening Values of Common Radionuclides for Building Surface Contamination" Table 1 shows the surface contamination guideline values chosen for the site.

Table 1: Acceptable Surface Contamination Levels

Isotope	Dpm/100cm ²	TetraLogic Limit dpm/ 100 cm ²
^{3}H	1.2×10^8	200

In an effort to show more than due diligence, TetraLogic chose to use a site-wide limit of 200 dpm/100 cm². All reachable areas, including lab benches, fume hoods, floors, walls, sinks, etc., were surveyed by TetraLogic and decontaminated to 200 dpm/100 cm² or less.

3.0 SITE MAP

See Attachment A.

4.0 FINAL STATUS SURVEY OVERVIEW

4.1 Survey Objectives

The purpose of the final status survey is to demonstrate that the on-site radiological conditions satisfy the NRC release guidelines and that the facility can be released for unrestricted use. In essence, TetraLogic and IES strive to show that efforts were made to exceed the decommissioning guidelines set forth by the NRC.

4.2 Organization and Responsibilities

TetraLogic organized and performed all decommissioning and sampling under the direction of RSO Srinivas Chunduru, Ph.D. Due to the limited space to be surveyed and the limited RAM use, a site assessment and preliminary surveys to determine primary and secondary survey areas were not necessary.

The locations surveyed by TetraLogic included, but were not limited to, the Biology lab as well as the adjacent lab corridor as bathroom doors, kitchen counter and floor, back door, and conference room door. TetraLogic provided all radiation survey equipment used in the surveys.

4.3 Instrumentation

One Beckman LS6500 Liquid Scintillation Counter (Serial # SEB7068512) was used for the analysis of the lab wipes. The counter was serviced by Mr. Steve Miller of Beckman in January 2007, just prior to being used to evaluate the final surveys.

Since ³H (Tritium) is not detectable with a regular survey meter and TetraLogic had no reason to suspect any fixed contamination, no Geiger surveys were performed.

4.4 Survey Procedures

Final Survey procedures were based on an evaluation of the TetraLogic Materials License, TetraLogic's site radiation safety and general safety procedures, and NRC regulations and guidelines for the release of facilities, specifically NUREG 1757.

The Biology Lab which was designated for radioactive use, transfer and storage, was considered a restricted area and surveyed appropriately. Wipe surveys were completed in the primary (biology) RAM use areas as well as in secondary areas such as the adjacent lab and office area. (See Section 4.4.1 for definitions of area classifications.) The background wipe was a clean swab inserted into a clean vial and filled with the same type and amount of cocktail as the rest of the samples. It was analyzed in the same tray at the same time as the other samples from that area. The liquid scintillation counter (LSC) was set to detect and measure ³H. DPM values were calculated by the LSC. Copies of the LSC printouts and associated map and list can be found in Attachment A.

4.4.1 Area Classification

For the purpose of establishing the sample and measurement frequencies, the site was divided into two general area types: Primary and Secondary (areas where no contamination was expected.). The basis for these classifications is described below:

Primary (Restricted) Areas

Primary areas are areas that have potential for radioactive contamination (based on facility operating history). This includes areas where radioactive materials were used and stored.

For the final survey, 100% of the surface areas in primary areas were surveyed using a Model 3 Geiger counter. Surfaces included, but were not limited to: floors, bench tops, sinks, hoods, and walls. Any areas with elevated Geiger readings were cleaned and re-surveyed.

Final survey wipes included 21 wipes in the lab and 7 additional wipes in the non-lab common areas. (As stated previously, this is a small facility – roughly 4,000 square feet. Previous monthly wipe results were reviewed to help determine the locations for the final wipes. Wipe maps were

drawn to include areas of potential contamination, commonly touched items, and in general to take samples in a grid like fashion to ensure all areas received some wipes. Wipe locations included doors, floors, sink drains, bench tops, hoods, and storage cabinets. As expected, no areas required additional decommissioning, because all areas were significantly below the inhouse level of 200 dpm.

Results of all surveys can be found in Attachment A. A summary can be found in Section 6.0.

Secondary (Adjacent) Areas

Areas immediately surrounding or adjacent to locations where radioactive materials were used and stored are included in this classification because of the potential for the inadvertent spread of contamination.

Since no radiation use took place in these areas, swipes were targeted at commonly used areas such as bathrooms, the kitchen and conference room.

Results of all surveys can be found in Attachment A. A summary of the can be found in Section 6.0.

4.5 Data Interpretation

Wipe data was printed in units of dpm/100cm² (surface activity) as seen in the LSC printouts in Attachment A.

No "hot spots" (areas with levels greater than 200 dpm/100 cm²) were found during the January 2007 survey. Thus, all areas, including the RAM use area, are well below the in-house action level of 200 dpm/100 cm². (See attached wipe results.)

4.6 Records

Survey records will be maintained by TetraLogic.

5.0 RADIOACTIVE INVENTORY AND WASTE RECORDS

RSO Srinivas Chunduru, Ph.D., with the help of authorized user Mr. Christopher Benetatos reviewed the TetraLogic radioisotope inventory, including the waste shipment records to ensure that all tritium received during the life of the license was accounted for and to verify that it had all been appropriately disposed. No discrepancies were found.

After a thorough check of the lab space at the end of RAM use in June 2004, a radioactive waste shipment for the long half-life 3H wastes was made on June 1, 2005. Philotechnics of Oak

Ridge, Tennessee handled the transport and shipment of this waste. Copies of the manifests for this shipment can be found in Attachment B.

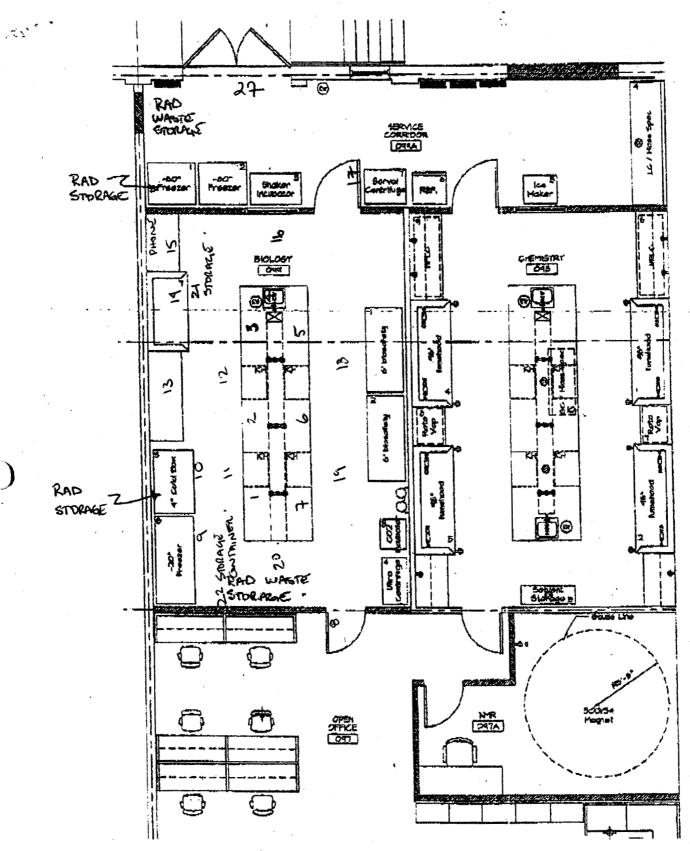
6.0 SUMMARY

A Final Site Survey of the leased TetraLogic facility in Malvern, Pennsylvania, was conducted January 31, 2007. Results of this survey demonstrate that areas surveyed/decontaminated by the TetraLogic staff responsible for decommissioning contain no residual activity above the NRC limits for release. No contamination was found and all areas, including areas of RAM use, are considerably below 200 dpm/100 cm². Hence the building easily meets the 10 CFR 20.1402, "Radiological Criteria for Unrestricted Use" of 25 mRem/yr.

On the basis of these results and completion of Form NRC 314 Certificate of Disposition of Materials (see Attachment C) the TetraLogic leased facility has been decommissioned to meet the requirements of NUREG 1757 "Consolidated NMSS Decommissioning Guidance" (Vol. 1 and Vol. 2) and is thereby acceptable for release for unrestricted use.

ATTACHMENT A

SURVEY MAPS & WIPE RESULTS – ALL AREAS (INCLUDES LSC PRINTOUTS)



ABORATORY EQUIPMENT PLAN

ADDITIONAL Swipe's (Locations ARE NOT ON MAP):

22-Men's Room Door

23- Kitchen floor

24 - Kitchen Counter

25 - Women's Room Door

26-Conference Room Door

27-Back Exit Door (HANDLe & Floor)

28- Survey Meter

```
ID:WIPE TEST
                                                31 JAN 2007 FR.CI
USER: 3
                     COMMENT:
              3,00
PRESET TIME :
DATA CALC : DL DEM HA :YES SAMELE REFERIE:
                                                PRINTER
                                                         : 378
COUNT BLANK:
              YES 10% : NO PEFLICATES : 1
                                                R5232
                                                         : OFF
TWO PHASE :
                MO POS : YES CYCLE REPEATS : 1
                                                DISK
                                                          : OFF
SCINTILLATOR:
             LIGUID LUNEX: NO LOW SAMPLE REJ: O
                                                RWM LIST
                                                        : OFF
LOW LEVEL : NO HALF LIFE CORRECTION DATE:
                                                none ·
150TOPE 1:
             3H %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB:
                                                         0
ISOTOPE 2:
             14C %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB:
```

ALLKGROUND QUENCH CURVE: Off

COLOR QUENCH CORRECTION: Off

Quench Limits Low: 9.218

Hioh:313.36

				********		:010:00										
SAM	POS	TIME	H#		3H	1	.4C	3H	14C		3H		14C	DATIO	LUMEX	El ADOTS :
NO		MIN		CPM	%ERROR		XERROR	DPM	DPM	EFF-1		EFF-1		MIIU	LUNCA	ELAPSED TIME
5.1															76	1 #110
	##-1		232.1		81.65		37.14	-1.09		13.66				-0.075	0.32	3.65
B2	** -2		43.5		44.72		40.82	8.52	10.44	56.45	0.51	17.81	76.22	0.816	0.10	7.26
			Average		for	3H :		. OF VAR:								
		preuk	Average	DPM	tor .	14C :	12.50 COEF	. OF VAR:	23.304							
1	* * -4	3.00	61.8	7.33	42.64	6.33	45.88	7.46	-4.18	52. 33	n A 9	17 01	75 50	-1.782	0.32	10.79
	** -5	3.00	60.0	4.67	53.45		41.70	1.71	-2.39		0.49			-0.715	0.31	14.30
S	¥ X - 6	3.00	58.8	4.00	57.74	7.67	41.70	0.42	-2.39					-0.177	0.29	17.82
4	11- 7	3.00	62.8	8.67	39.22		38.49	8.85	-0.66	52.09	0.49			-13.52	0.31	21.45
	**-8	3.00	64.1	7.67	41.70	11.67	33.81	5.76		51.80		17.92		1.982	0.23	24.95
	‡ ‡-9	3.00		6.33	45.88	8.00	40.82	4.76		52.48	0.49		75.54		0.20	28.57
	**-1 0	3.00		4.67	53.45	9.00	38.49	1.07	-0.63	53.17	0.49	17.88		-1.698	0.19	32.21
	##-11	3.00		6.33	45.88	9.00	38.49	4.25	-0.65		0.49	17.89		-6.582	0.22	35.83
	## -12	3.00		7.33	42.64	8.67	39.22	6.12	-1.13	53.90	0.49		75.78		0.14	39.46
	¥ ‡ -13	3.00		7.00		7.67	41.70	6.02	-2.43	53.44	0.49	17.88		-2.474	0.25	43.10
	* * - 14	3.00		6.00		6.67		4.56	-3.75	53.65	0.49			-1.216	0.16	46.73
	##-15	3.00			41.70	11.00		5.91	1.99	52.72	0.49			2.965	0.11	50.36
15	¥ * -16	3.00	54.8	4.67	53.45	7.00	43.64	1.89	-3.30	53.93	0.49	17.87	75.78	-0.575	0.23	53.99
	**-17	3.00	57.9	6.33	45.88	9.00	38.49	4.21	-0.66	53.24	0.49	17.88	75.67	-6.423	0.13	57.61
	**-18	3.00		7.00		8.33		5.67	-1.56	53.81			75.76	-3.633	0.08	61.25
	** -1	3.00			44.72	8.33		5.19	-1.53		0.49	17.89	75.60	-3.386	0.18	64.87
	##-2 ##-7	3.00		5.33		7.00		3.17	-3.30	53.58	0.49	17.88	75.72	-0.962	0.34	68.51
	##-3 ##-4	3.00		5.33	50.00	7.00		3.16	-3.30	53.66	0.49		75.74	-0.959	0.07	72.15
		3.00		3.67	60.30		37.80	-0.98	-0.19	53.74	0.49	17.87	75.75	5.037	0.05	75.79
	##-5		55.7	4.33	55.47	5.67	48.51	1.88	-5.05	53.73	0.49		75.75		0.10	79.43
21	¥ \$ -6		531.3 - OUTUG	0.00	0.00	1.67		-66.42	-1.92	0.02	0.75	0.10	20.20	34.659	0.08	83.97
22	** -7	00 T	58.3			DE QUENCH										
	** -8	3.00			50.00	10.33		1.74		53.13	0.49	17.89		1.546	0.09	87.59
	##-0 ## -9			6.33	45. 88	5.33		5.71	-5.52			17.86		-1.034	0.07	91.23
	**-10	3.00	54.7		43.88 44.72	7.67	41.70	4.95		52.25			75.51		0.09	94.86
	**-11	3.00	54.5	5.00	51.64	9.00 0.47	38.49 37.14	4.73		53.97		17.87		-6.978	0.08	98.51
	##-12	3.00	55.9	5.00	51.64	10.33	37.14 35.92	1.34		54.02		17.86		6.015	0.07	102.14
	**-13	3.00	59.9		55.47	8.33	33.72 40.00	1.07		53.68		17.87		0.962	0.10	105.78
		-100	witt	1100	JV:7/	0.00	40.00	0.77	-1.50	34./6	V.4Y	17.90	/5.54	-0.514	0.12	109.41

ATTACHMENT B RADIOACTIVE DISPOSAL WASTE MANIFEST

ORM 542		Consig	WASTE COLLECTOR/PROCESSOR								2. MANIFEST NUMBER								
	UNIFORM LOW-LEY WASTE M		NAME SHIPPER USE ONLY Philotechnics, Ltd. SC TRANSPORT PERMIT NUMBER																
	MANIFEST INDEX AND REGIO				XD982560294						3.								
	List all original "PROCESSED before "COLLECTED	WASTE" generators		SHIPPING DA 05/18/2005							PAG	E	OF	F	PAGE(S)				
4 . 5.		6.	6A. 7.			8. MANIFEST NUMBER(S)	9.	10.	11.		AS PROCESSED/COLLECTED TOTAL								
GENERATOR IDENDIFICATION NUMBER	GENERATOR NAME AND TELEPHONE NUMBER	GENERATOR FACILITY ADDRESS	WASTE DESCRIPTION (NOMENCLATURE)	PREPROG WAS (OR MAT VOLU (m²)	STE (ERIAL)	NUMBER(S) UNDER WHICH WASTE(OR MATERIAL) RECEIVED AND DATE OF	WASTE CODE P=PROCESSED C=COLLECTED	ORIGINATING COMPACT REGION OR STATE	A. SOL MATE		B. SNM	C. ACT			LUME	E. WEIGHT	F. MAXIMUM PACKAGE RADIATION LEVEL		
				(117)	(it)	RECEIPT			(kg)	(lb)	(g)	(MBq)	(mCi)	(m²)	(ft³)	(lb)			
0518	Gentara Corp. 610-889-9900 x-120	365 Phoenixville Pike Malvern, PA 19355	LSV	0.03	1.20	NA 05/18/2005	c	PA	0.00E+00	0.00E+00	0.00E+00	1.85E+00	5.00E-02	0.03	1.20	20.00	<0.10		
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,															
																	:		
					2														
									The state of the s										
			т	OTALS	YE ALL DA	GES (FORMS 54	12 AND 542A		,,,,										
			•	- INEU C	- ALL FA	CLO (1 ORIV.S 54	** WIND 945W	,	NP	NP	NP	5.000E-02	1.35E-03	0.03	1.200E+00	2.000E+C1	N. A		
RM 642 (10-96)									<u> </u>										

FORM 541 (8-98/ISIP) Consigned to: Philotechnics, Ltd.

UNIFORM LOW-LEVEL RADIOACTIVE **WASTE MANIFEST**

CONTAINER AND WASTE DESCRIPTION

		2.MANIFEST NUMBER								
NUMBER OF PACKAGES/	NET WASTE	NET WASTE		SPECIAL NUCL	0518-060105NSSI					
DISPOSAL	VOLUME	WEIGHT	U-233	U-235	Pu		TOTAL	1		
4	m³ 0.03	kg 9.07								PAGE TOF PAGE(S)
1	₦³ 1.200E+00	ıь 2.000Е+01	NP	NP	NP		NP	A CUIDPED MANE		
		AC	TIVITY (MBq/mCi)				0011000	Philotechnics, Ltd.		
	ALL NUCLIDES	TRITIUM	C-14	Tc-99	1-129		SOURCE	- Innotectimes, Eta.		
MBq	1.850E+00	1.850E+00	NP	NP	NP	kg	NP	SHIPPER ID NUMBER		
mСi	5.000E-02	5.000E-02	NP	NP	NP	lb	NP	0518-060105NSSI		

							1.000E-02	5.000E-02	NP	NP NP	NP	lb	NP	0516-060105N55			
	DISF	POSAL CONTAIN	NER DESCRIPTION		·			WASTE D	ESCRIPTION FOR E	ACH WASTE TYPE IN CONTAIN	NER	_			16.		
CONTAINER IDENTIFICATION NUMBER/	6. CONTAINER DESCRIPTION	7. VOLUME	8, Waste And Container Weight	9. SURFACE RADIATION LEVEL	CONTAN MBq/1	FACE MINATION 00 cm ² 00 cm ²	11. WASTE DESCRIP-	PHYSICAL DESCRIPTION 12. APPROXIMATE WASTE VOLUME(S)	13. SORBENT SOLIDIFICATION,	14. CHEMICAL DESCRIPT CHEMICAL FORW	WEIGHT		WEIGHT	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL OR CONTAINER TOTAL ACTIVITY			WASTE CLASSIFI- CATION AS-Class A Stable
TRANSPORT PERMIT NUMBER(S)	(See Note 1)	₩.	kg 	mSv/hr /hr mrem/hr	ALPHA	BETA- GAMMA	TOR (See Note 2)	IN CONTAINER m³	STABILIZATION MEDIA (See Note 3)	CHELATING AGENT	CHELATING AGENT IF > 0.1%	RADIONUCLIDES	AND RADIONUCLIC		AU-Clas Unstal B-Clas C-Clas		
1 0518	4 10 GAL	3.40E-02	9.07	<1.00E-03	<3.33E-07	<1.67E-05	59 THERMAL LSV	3.40E-02	100	1,2,4-Trimethylbenzene NP	thylbenzene NP		1,2,4-Trimethylbenzene NP H		1.85E+00 1.85E+00	5.00E-02 5.00E-02	AL
		1.20	20.0 #	<0.10	<20.00	<1.00E+03		1.20E+00				Pkg Total	1.85E+00	5.00E-02			

NOTE 1: Container Description Codes. For containers/
waste requiring disposal in approved structural overpacks,
the numerical code must be followed by "-OP."

1. Wooden Box of C∷te

2. Metal Box

10. Gas Cylinder

9. Demineralizer

3. Plastic Drum or Pail 4. Metal Drum or Pail 11. Bulk, Unpackaged Waste 12. Unpackaged Components

5. Metal Tank or Liner

6. Concrete Tank or Liner

13. High Integrity Container

19. Other Describe in item 6,

or additional page 7. Polyethylene Tank or Liner

8. Fiberglass Tank or Liner

NOTE 2: Waste Descriptor Codes. Choose up to three which predominate by volume

20. Charcoal

21. Incinerator Ash

22. Soil

23. Gas 24. Oil

25. Aqueous Liquid

26. Filter Media 27. Mechanical Fitter 28. EPA or State Hazardous 33. Contaminated Equipment 34. Organic Liquid, except Oil

37. Paint or Plating

29. Demolition Rubble

35. Glassware or Labware 36. Sealed Source/Device

30. Cation Ion-exchange Media

31. Anion Ion-exchange Media

32. Mixed Bed Ion-exchange Media

38. Evaporator Bottoms/Sludges/Concentrates

39. Compactible Trash

40. Noncompactible Trash

41. Animal Carcass 42. Biological Material (except animal carcass)

43. Activated Material

59. Other, Describe in Item 11, or additional page

Note 3: Sorption, Solidification, Stabilization Media Codes.(Choose up to three which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must

also be identified in Item 13. Code 100 = NONE REQUIRED

Sorption Solidification 60. Speed Dri 64. safe T Sorb 69. Chemsil 30 74. Petroset 89. Other. 90. Cement 94. Vinyl Ester Styrene 61. Celetom 65. Safe N Dri 70. Chemsil 50 75. Petroset II Describe in 91. Concrete 99. Other. Describe item13, or 62. Floor Dry 66. Florco (encapsulation) in item 13, or 71. Chemsil 3030 76. Aquaset additional additional page Superfine 67, Florco X 72. Dicaperl HP200 77. Aquaset II 92. Bitumen page 63. Hi DriGas 68. Solid A Sorb 73. Dicaperl HP500 93. Vinyl Chloride 100. None Required

FORM 540 (8-98/ISIP) UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER 1. EMERGENCY TELEPHONE NUMBER (Include Area Code) 800-424-9300 ORGANIZATION CHEMTREC 2. IS THIS AN EXCLUSIVE USE SHIPMENT? YES X NO 4. DOES EPA REGULATED X VES EPA MANIFEST NUMBER				AME AND FACILITY s @ Gentara Corp. ville Pike 19355 NUMBER NA I ne and Address ing Road O, 64841	SHIPMENT NUMBER 0518-060105NSSI	SHIPPER ID NUMBER 0518-060105NSSI X COLLECTOR PROCESSOR GENERATOR TYPE Specify TELEPHONE NUMBER (101-889-9900 x-120 EPA I.D. NUMBER NA SHIPPING DATE 05/18/2005 TELEPHONE NUMBER	and are in	DATE DATE DATE DATE DISTRIBUTION OF THE PROPERTY OF THE PR	MBER de) marked, and labeled partment of			
4. DOES EPA REGULATED X YES WASTE REQUIRING A MANIFEST ACCOMPANY NO THIS SHIPMENT? If 'Yes' provide manifest Number ====>	325310	00	Mitch Lunsfe	ord	Iging receipt TCC	(Include Area Code) 866-252-2784 DATE	condition equivalent		ind disposal as des		packaged, marked, and lab licable requirements of 10 (
11. U.S. DEPARTMENT OF TRANSPOR (Include proper shipping name, hazard and any other informa Waste Flammable Liquids, n.o.s., 3, UN1993(1.2.4	class, UN ID number, ation	12. DOT LABEL RADIOACTIVE	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM LIQUID/1,2,4-Trimethylbe		15. INDIVIDUAL RADIONUCLIDES			6. ACKAGE WITY mCi	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
this manifest, that NS	generator of the waste s SSI has the appropriate p waste the generator is		material/wasi approved by CFR 173.443 B) Data. Gener MANIFEST a regulations a C) Hazardous N in 40 CFR 26 D. INFECTIOUS	Materials. Certification is hereby e has been prepared in accorde the NRC or an Agreement State concerning contamination contator hereby represents and wan re true and correct in all respect of the above mentioned procest	ance with a radio e regulatory age rols on the exte rants that alldat ats and in accord sors Radioactive tifies that this me by certifies that	pactive waste man ncy and furtherm rnal surfaces of the a set forth in this U lance with all appli e Material License aterial does not co this material does	agement program ore meets the criter ore packages. NIFORM RADIOA cable governmenta s. ntain a hazardous	which has been ria set forth in 49 CTIVE WASTE al laws, rules, waste as defined ectious substance a	is			

ATTACHMENT C

NRC FORM 314 CERTIFICATE OF DISPOSITION OF MATERIALS

NRC FORM 314 U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB: NO. 3150-0028	EXPIRES: 06/30/2007						
(6-2004) 10 CFR 30.36(j)(1); 40.42(j)(1);	Estimated burden per response to comply with the							
70.38(j)(1); and 72.54(j)(1)	This submittal is used by NRC as part of the be released for unrestricted use. Send comments re	egarding burden estimate to the Records and						
CERTIFICATE OF DISPOSITION OF MATERIALS	FOIA/Privacy Services Branch (T-5 F52), U.S. Nuc 20555-0001, or by internet e-mail to infocollects							
	Information and Regulatory Affairs, NEOB-1020 Budget, Washington, DC 20503. If a means used	02, (3150-0028), Office of Management and						
	display a currently valid OMB control number, to person is not required to respond to, the information	he NRC may not conduct or sponsor, and a						
LICENSEE NAME AND ADDRESS	LICENSE NUMBER	DOCKET NUMBER						
TetraLogic Pharmaceuticals	37-30924-01							
365 Phoenixville Pike	LICENSE EXPIRATION DATE							
Malvern, PA 19355	09/30/2014							
A. LICENSE STATUS (Check the This license has expired. This license has not yet expired; pleas		vensee is adding new address to License. nendment request sent under separate cover.						
B. DISPOSAL OF RADIOACT	IVE MATERIAL							
(Check the appropriate boxes and complete as necessary. If additional space is not licensee, or any individual executing this certificate on behalf of the license								
No radioactive materials have ever been procured or possessed by		!						
		anned by the Barrer						
 All activities authorized by this license have ceased, and all radioact under this license number cited above have been disposed of in the 	following manner. at 365 Pho	enixville Pike						
a. Transfer of radioactive materials to the licensee listed below:	•	M						
b. Disposal of radioactive materials:								
Directly by the licensee:								
✓ 2. By licensed disposal site:								
via Philotechnics of Oakridge Tennessee								
By waste contractor:								
c. All radioactive materials have been removed such that any remai	ning residual radioactivity is within	n the limits of 10 CFR						
Part 20, Subpart E, and is ALARA.								
C. SURVEYS PERFORMED A								
1. A radiation survey was conducted by the licensee. The survey confirm	ms:							
✓ a. the absence of licensed radioactive materials								
b. that any remaining residual radioactivity is within the limits of 10 0	CFR 20, Subpart E, and is ALARA	4 .						
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:_							
3. A radiation survey is not required as only sealed sources were ever p	ossessed under this license, and	Date						
a. The results of the latest leak test are attached; and/or	b. No leaking sources have eve	er heen identified						
	b. Two loaking sources have eve	or been identified.						
The person to be contacted regarding the information provided on this form:	TELEPHONE () / A	no Codo) E MAII ADDESCO						
Srinivas Chunduru, Ph.D. RSO	TELEPHONE (Include Ar (610) 889-9900	ea Code) E-MAIL ADDRESS						
Mail all future correspondence regarding this license to: Srinivas Chunduru, Ph.D. at 343 Phoenixville Pike, Malvern, PA 19355		'						
C. CERTIFYING OFFICIAL								
I CERTIFY UNDER PENALTY OF PERJUR Y TH AT THE								
PRINTED NAME AND TITLE Mark McKinlay, Ph.D., Chief Scientific Officer SIGNATURE SIGNATURE		3-27-07						
	1							

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.