

Charlie A. Dooley
County Executive



Dolores J. Gunn, MD
Director

June 27, 2012

Bryan Parker
Materials Licensing Branch
U. S. Nuclear Regulatory Commission, Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

RE: Revision to Application to Amend License No. 24-11263-01

Dear Mr. Parker:

St. Louis County Department of Health (SLCDH) wishes to revise Provisions 6, 7, and 8 of our application dated May 1, 2012.

Change in Authorized Inventory

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form¹	8. Maximum amount that licensee may possess at any one time under this license
A. Americium-241	Any	0.5 microcuries
B. Radium-226	Any	0.5 microcuries
C. Radium-228	Any	0.5 microcuries

¹ Purchased as standard reference materials used for instrument calibration and measurement quality control

Documentation on the disposal of License Amendment 20, Item D: Radium-226, sealed source (Nucleus Inc. Model Ra-226-SC; NMC Gold Standard Series Ra 226 disc) is included in Appendix 1. The final disposal records are still pending.

ENVIRONMENTAL HEALTH LABORATORIES

111 South Meramec Avenue, • Saint Louis, MO 63105 • PH 314/615-8324 • FAX 314/615-1648
TTY 314/615-8428 or 800/735-2966 • web <http://www.stlouisco.com>
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Mr. Bryan Parker

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June 27, 2012

If you have any questions, or if we can provide you with additional information, please do not hesitate to contact me at (314) 615-6830. Thank you for your timely attention to our NRC license amendment request

Sincerely,



Digitally signed by Robert A. Nicolotti, PhD
DN: cn=Robert A. Nicolotti, PhD, o=Saint Louis County
Department of Health, ou=Environmental Health
Laboratories, email=micolotti@stlouisco.com, c=US
Date: 2012.06.27 16:43:02 -05'00'

Robert A. Nicolotti, Ph.D.
Radiation Safety Officer

cc: Jennifer Western, Radiology Supervisor

Attachments: 2

Appendix 1: Radionuclide Disposal Inventory and Manifest

APPROVED BY OMB: NO. 3160-0164
EXPIRES: 07/31/2010

Estimated burden per response to comply with this information collection request: 46 minutes. This uniform manifest is required by NRC to meet reporting requirements of Federal and State Agencies for the safe transportation and disposal of low-level waste. Send comments regarding burden estimate to the Records and Privacy Service Branch (T-5 P&S), U.S. Nuclear Regulatory Commission, Washington, DC 20545-0001, or by Internet e-mail to infocoll@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, HEOB-10302, (3160-0164), 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.

NRC FORM 540 (7-2007)			U.S. NUCLEAR REGULATORY COMMISSION UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER			6. SHIPPER - NAME AND FACILITY Saint Louis County Department of Health 111 South Meramec, 6th Floor Clayton, MO 63105		SHIPPER I.D. NUMBER HEM-2011001.02 <input type="checkbox"/> COLLECTOR <input type="checkbox"/> PROCESSOR <input checked="" type="checkbox"/> GENERATOR TYPE (Specify)		7. NRC FORM 540 AND 540A NRC FORM 541 AND 541A NRC FORM 542 AND 542A ADDITIONAL INFORMATION		8. MANIFEST NUMBER (Use this number on all continuation pages) 2011001.02						
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) 1-800-424-9300			USER PERMIT NUMBER HEM License #T-TN058-L-10		SHIPMENT NUMBER Tosco # A11188		TELEPHONE NUMBER (Include Area Code) 314-618-8338		EPA I.D. NUMBER		9. CONSIGNEE - Name and Facility Address Tosco MMC 108 Flint Road Oak Ridge, TN 37830		CONTACT Rick Low TELEPHONE NUMBER (Include Area Code) 865-462-5532					
ORGANIZATION CHEMTREC			2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST 1		5. CARRIER - Name and Address R&R Trucking PO Box 648 Duraweg, MO 64641		SHIPPING DATE 08/03/11		SIGNATURE - Authorized consignee acknowledging waste receipt		DATE					
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes," provide Manifest Number			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		EPA MANIFEST NUMBER		CONTACT Sarah Hogg SIGNATURE - Authorized carrier acknowledging waste receipt Keith Reeves		TELEPHONE NUMBER (Include Area Code) 800.628.8884 Ext 2188		DATE 8/3/11		AUTHORIZED SIGNATURE Rick Low					
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)			12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIONUCLIDES		16. TOTAL PACKAGE ACTIVITY (MBq)		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
Radioactive material, excepted package-limited quantity of material, 7, UN 2910			NA		NA		Solid/liq Oxides		Am-241 Sr-90 Th-230		3.3448E-01		NA		60 LBS; 2.7 FT3		SLC-001	
Radioactive material, excepted package-limited quantity of material, 7, UN 2910			NA		NA		Solid Oxides		Am-241 Sr-133 Co-60 Ra-226 Th-230 U-238		4.4288E-02		NA		60 LBS; 2.7 FT3		SLC-002	
FOR CONSIGNEE USE ONLY																		

NRC FORM 540 (7-2007)

Notes: For solidification media that must dispose site treatment stability requirements, the numerical code must be followed by "-L." For all solidification media, the vendor (manufacturer) and brand name must also be identified in item 13. Code 100=NONE REQUIRED.

Soil/Slop				Solidification	
50. Speedi Dri	64. Safe T Sorb	69. Chemal 30	74. Petroseal	99. Other, Describe in item 13, or additional page	94. Vinyl Ester Sylene
51. Calcium	65. Safe H Dri	70. Chemal 50	75. Petroseal II	91. Concrete (enopulcrate)	99. Other, Describe in item 13, or additional page
52. Floor Dry/Supertine	66. Floco	71. Chemal 3030	76. Aqueaseal	92. Blumen	
53. Hi Dri	67. Floco X	72. Dispersi HP200	77. Aqueaseal II	93. Vinyl Chloride	100. None Required
	68. Solid A Sorb	73. Dispersi HP600			

[illegible]

Inventory of Disposed Radionuclide Sources

NRC License #: 24-11263-01

Saint Louis County Department of Health
Environmental Health Laboratories

111 South Meramec

Clayton, MO 63105

RSO: Dr. Robert Nicolotti

314-615-6830 (Office)

Calibration Check Sources

	Reference Date	microCi	Serial #	Manufacturer	Description
Ra226	12/7/1990	0.0144	408	The Nucleus	Charcoal Radon Standard
Ra226	11/1/1979	0.0075		NMC	Gold Standard Series
Ra226	3/10/1977	0.0075		NMC	Gold Standard Series
C-14	10/22/1973	0.0100		Amersham/Searle	
Sr-90	8/1/1993	0.0508	X-795	Isotope Products Laboratories	Planchet
Sr-90	1/1/1995	0.0485	CC-176	Isotope Products Laboratories	Planchet
Sr-90	1/1/1995	0.0565	CC-175	Isotope Products Laboratories	Planchet
Th-230	10/1/1999	0.0151	QQ-767	Isotope Products Laboratories	Planchet
Th-230	10/1/1999	0.0131	QQ-768	Isotope Products Laboratories	Planchet
Ba-133	12/15/1975	0.1140	405	American Nuclear Products	Gamma Disc
Cs-137	12/15/1975	0.1470	406	American Nuclear Products	Gamma Disc
Co-60	12/1/1975	0.0850	407	American Nuclear Products	Gamma Disc
Ba-133			GP-1A	Picker Nuclear	Gamma Disc
Cs-137			GP-3A	Picker Nuclear	Gamma Disc
Co-60			GP-5A	Picker Nuclear	Gamma Disc
Sr-90/Y-90	12/1/1975	0.0850	404	American Nuclear Products	Planchet
U-238	11/1/1954			Tracerlab	R-6 Uranium X Uncalibrated beta source.
Ur 238/235/234	5/11/1959		412	Tracerlab	R-16 Uncalibrated Uranium Alpha Source. Approximate disintegration rate 4150 (no units provided).
Uranium Oxide					Alpha Source # 434 Uncalibrated (3 inch metal disc)
Uranium Oxide					Beta Source #435 Uncalibrated (3 inch metal disc)
Pb-210	11/21/1984	0.0099	8487		
Am-241		0.0050	NES-300		
Cs-137		1.0000			Clear Rod

Americium-241 Liquid Source - pH 1.5

Standard	Reference Date	Activity (pCi/ml)	vol. (mls)	microCi
Am241				
74-1	Sep-73	1,087	50	0.054
77-2A	12/1/1977	8,874	990	8.79
77-2B	12/1/1977	8.9	750	0.0067
Total			1,790	8.85

30 gallon drum of planchets

Stainless steel planchets spiked with less than 100 picoCuries each of either Am-241, Th-230, Natural U, or Sr90-Y90.