

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PENNSYLVANIA 19406-1415

May 15, 2003

License No. 29-00139-02

Docket No. 03005222 Control No. 132943

John Mamone Vice President, Operations Support E. R. Squibb & Sons, Inc. Mailstop HW8T-1.12 311 Pennington-Rocky Hill Road Pennington, NJ 08534-2130

## SUBJECT: E. R. SQUIBB & SONS, INC., ISSUANCE OF LICENSE AMENDMENT, CONTROL NO. 132943

Dear Mr. Mamone:

This refers to your license amendment request. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5239, so that we can provide appropriate corrections and answers.

An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14).

In accordance with 10 CFR 2.790, a copy of this letter will be placed in the NRC Public Document Room and will be accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm.html">http://www.nrc.gov/reading-rm.html</a>.

Thank you for your cooperation.

Sincerely,

## Original signed by Elizabeth Ullrich

Elizabeth Ullrich Senior Health Physicist Nuclear Materials Safety Branch 2 Division of Nuclear Materials Safety

Enclosure: Amendment No. 106

cc: Michael J. Vala, C.H.P., Radiation Safety Officer

## J. Mamone

E. R. Squibb & Sons, Inc.

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML031360607.wpd <u>To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl</u> "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	Ν	DNMS/RI	Ν	DNMS/RI		
NAME	DJanda/dmj		EUllrich/exu				
DATE	DATE 05/15/2003		05/15/2003				

OFFICIAL RECORD COPY

NRC	FORM 374 U.S		PAGE <u>1</u> OF <u>8</u> PAGES Amendment No. 106							
	MATERIALS LICENSE									
Purse of Fe heret sourc delive shall appli below	Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.									
	Licensee			In accordance w	ith t	he letter dated				
				March 19, 2003,						
1. E	. R. Squibb & Sons, Inc.			3. License number	29-	00139-02 is amended in				
		J	EARR	its entirety to rea	id a	s follows:				
2. 3	11 Pennington-Rocky Hill Road	1		4. Expiration date S	Sept	tember 30, 2008				
N	1ail Stop HW8T-1.12			5. Docket No. 030	-052	222				
P	ennington, New Jersey 08534-2130			Reference No.	3					
6.	Byproduct, source, and/or special nuclear material	7.	Chemical and/o	r physical form	8.	Maximum amount that licensee may possess at any one time under this license				
A.	Any byproduct material with atomic numbers 1 through 83, except Strontium 90	Α.	Any	and a start of the	A.	100 millicuries per radionuclide and 2 curies total				
В.	Hydrogen 3	В.	Any	B-all	В.	150 curies				
C.	Carbon 14	C.	Any	44	C.	20 curies				
D.	Strontium 90	D.	Any	. 6	D.	2 millicuries				
Ε.	Technetium 99m	Е.	Any	XX	Ε.	750 millicuries				
F.	Any byproduct material with atomic numbers 84 through 103	F.	Any		F.	1 millicurie				
G.	Nickel 63	G.	Foil or plated registered eit U.S. Nuclear Commission 10 CFR 32.2 Agreement S	sources her with the Regulatory under 10 or with an state.	G.	No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State				
H.	Any byproduct material with atomic numbers 1 through 83, except Strontium 90	H.	Any		H.	200 millicuries per radionuclide and 6 curies total				

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	MATERIALS LICE SUPPLEMENTARY S	NS HEE	E						
				Amendmer	nt N	o. 106			
6.	Byproduct, source, and/or special nuclear material	7.	Chemical and/or physic	al form	8.	Maximum amount that licensee may possess at any one time under this license			
١.	Hydrogen 3	١.	Any		I.	7 curies			
J.	Carbon 14	J.	Any		J.	5 curies			
K.	Phosphorus 33	K.	Any R REG	iu,	K.	1 curie			
L.	Sulfur 35	Ľ	Any	-4,	L.	10 curies			
M.	lodine 125	M.	Any		Μ.	500 millicuries			
N.	Nickel 63	N. / June	Foil or plated source registered either with U.S. Nuclear Regult Commission under 10 CFR 32.210 or ward Agreement State	es th the latory with an	N.	No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State			
Ο.	Any byproduct material with atomic numbers 1 through 83, except, Strontium 90	0.	Any		Ο.	200 millicuries per radionuclide and 6 curies total			
Ρ.	Hydrogen 3	Ρ.	Any	and a second	Р.	1 curie			
Q.	Carbon 14	Q.	Any	1 4	Q.	1 curie			
R.	Sulfur 35	R.	Any	×	R.	300 millicuries			
S.	Calcium 45	S.	Any		S.	300 millicuries			
Т.	Nickel 63	Τ.	Foil or plated source registered either wi U.S. Nuclear Regul Commission under 10 CFR 32.210 or v Agreement State	es th the latory with an	Т.	No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State			
U.	Any byproduct material with atomic numbers 1 through 83, except Strontium 90	U.	Any		U.	10 millicuries per radionuclide and 1 curie total			

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MATI SUPP	ERIALS LICENSE	-	Docket or Reference 030-05222	Number				
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<ol> <li>Byproduct, source, and/c nuclear material</li> </ol>	r special 7. (	Chemical and/or physic	cal form 8.	Maximum amor possess at any license	unt that li one time	cense unde	e may r this	
V. Hydrogen 3	V. /	Any	V.	100 millicurie	es			
W. Carbon 14	W. /	Any	W.	100 millicurie	es			
X. Sulfur 35	X. 7	ANK REC	X. :	300 millicurie	es			
Y. Phosphorous 32	CY.	Any	4 Y.	100 millicurie	es			
Z. Phosphorous 33	< Z. /	Any	Z	200 millicurie	es			
AA. lodine 125	AA.	Any	AA.	50 millicu	ries			
BB. Nickel 63	B STATE	Foil or plated so registered either U.S. Nuclear Re Commission und 10 CFR 32.210 Agreement State	urces BB. with the gulatory der or with an e	No single the maxin specified registratic U.S. Nucl Commiss Agreemen	source num act in the c on issue ear Reg ion or a nt State	to ex ivity ertific d by gulato n	<ceed cate of the ory</ceed 	
CC. Cesium 137	EIND CC.	Sealed Sources Shepherd and A Model 6810)	(J.L. CC. ssociates	No single the maxin source or per device certificate issued by Regulator an Agreer	source maxim specif of regis the U.S y Comr ment St	to ex ivity um a ied ir strati S. Nu nissi ate	ແceed per ctivity າ the on clear on or	
9. Authorized use:								
<ul> <li>Autorized use.</li> <li>A., B., C., D., and F. Research and development as defined in 10 CFR 30.4; animal studies; and calibration and checking of the licensee's instruments.</li> <li>E. Research and development as defined in 10 CFR 30.4; animal studies.</li> <li>B. and C. Preparation and distribution of radioactive drugs to authorized recipients in accordance with 10 CFR 32.72.</li> </ul>								

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H. tł	nrou	gh M., O. through S., and U. through AA. Re 30.	search and development as defined in 10 CFR 4; animal studies; and calibration and checking					
GΝ	ιт	or and BB To be used for sample analysis in comp	atible gas chromatography devices that have					
0., 1	•••, •	been registered either with the U.S. Nuc	clear Regulatory Commission under					
		10 CFR 32.210 or with an Agreement S	tate and have been distributed in accordance					
		with a Commission or Agreement State	specific license authorizing distribution to					
		possess, and use the devices.	minission of Agreement State license to receive,					
CC.	For	irradiation of materials in self-shielded irradiator devic	es that have been registered either with the U.S.					
	Nuc	lear Regulatory Commission under 10 CFR 32.210 or	with an Agreement State and which have been					
1	to pe	ersons specifically authorized by a Commission of Agreeme	reement State license to receive, possess, and					
	use	the devices.						
		CONDITIONS	23 C					
		CONDITIONS	0					
10.	A.	Licensed material in Items 6.A. through 6.G. may onl One Squibb Drive, New Brunswick, New Jersey.	y be used at the licensee's facilities located at					
	B.	Licensed material in Items 6.H. through 6.N. and 6.C located at Route 206 and Provinceline Road, Lawren	C. may only be used at the licensee's facilities ceville, New Jersey.					
	C.	Licensed material in Items 6.O. through 6.T. may onl 311 Pennington-Rocky Hill Road, Pennington, New J	y be used at the licensee's facilities located at ersey.					
		Licensed meterial in Itams 6 LL through 6 PD, may a	ally be used at the licenses's facilities leasted at					
	D.	Three Hamilton Health Place, Hamilton, New Jersey.	my be used at the licensee's facilities located at					
11. /	A.	Licensed material shall be used by, or under the supplicensee's Radiation Safety Committee.	ervision of, individuals designated by the					
	B.	The Radiation Safety Officer for this license is Micha	el J. Vala, CHP.					
12.	<ol> <li>The licensee shall not use licensed material in or on human beings except as provided otherwise by specific condition of this license.</li> </ol>							
13.	<ol> <li>The licensee shall not use licensed material in field applications where it is released except as provided otherwise by specific condition of this license.</li> </ol>							

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			License Number 29-00139-02								
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14.	<ol> <li>Experimental animals administered licensed materials or their products shall not be used for human consumption.</li> </ol>										
15.	15. This license does not authorize commercial distribution of licensed material to persons generally licensed pursuant to 10 CFR Part 31 or equivalent regulations of any Agreement State or to persons exempt from licensing pursuant to 10 CFR 30.14 through 30.20 inclusive, or equivalent regulations of any Agreement State.										
16.	This	s license does not authorize commercial distribution	n of licensed material.								
17./	۹.	Sealed sources shall be tested for leakage and/ intervals specified in the certificate of registration under 10 CFR 32.210 or under equivalent regula	r contamination at intervals not to exceed the issued by the U.S. Nuclear Regulatory Commissi tions of an Agreement State.	ion							
	В.	Notwithstanding Paragraph A of this Condition, s particles shall be tested for leakage and/or conta	ealed sources designed to primarily emit alpha mination at intervals not to exceed 3 months.								
	C.	Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.									
	D.	D. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commissi under 10 CFR 32.210 or under equivalent regulations of an Agreement State, prior to the transfer, sealed source received from another person shall not be put into use until tested and the test resul received.									
	E.	E. Sealed sources need not be tested if they contain only hydrogen-3; or they contain only a radioactive gas; or the half-life of the isotope is 30 days or less; or they contain not more than 100 microcuries of beta- and/or gamma-emitting material or not more than 10 microcuries of alpha-emitting material.									
	F.	Sealed sources need not be tested if they are in storage and are not being used; however, when they are removed from storage for use or transferred to another person and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.									
	G.	. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.									

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	H.	Test perfo Com	s for leakage and/or contamination, including leab ormed by the licensee or by other persons specific mission or an Agreement State to perform such s	c test sample collection and analysis, shall be cally licensed by the U.S. Nuclear Regulatory services.						
18.	<ol> <li>Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.</li> </ol>									
19.	<ol> <li>The licensee shall conduct a physical inventory every six months, or at other interval approved by the U.S. Nuclear Regulatory Commission, to account for all sealed sources and/or devices received and possessed under the license.</li> </ol>									
20.	D. The licensee shall not repair, remove, replace, or alter any of the following: electrical and mechanical systems that control source or shielding movement, the irradiator's shielding or sealed source, safety interlocks, or any component that may affect safe operation of the irradiator. These activities shall be performed by a person specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.									
21.	For the	each licens	J. L. Shepherd and Associates, Mark I or Model a see shall:	81-22, cesium-137 irradiator installed and used,						
	A.	Pern mon	nit the use of the irradiator only when a calibrated itor is available; and	and operable radiation survey meter or room						
	В.	Pern that	nit the irradiator door to be opened only after the other source has returned to its safe storage position	operator has checked visual indicators to verify on; and						
	C.	Have	e room monitors installed that will:	*						
		<ul> <li>(i) Operate at all times when the irradiator is in use; and</li> <li>(ii) Activate a visible and audible alarm when radiation exceeds 2 millirems per hour; and</li> <li>(iii) Detect any radiation leaking from the irradiator door; and</li> <li>(iv) Be visible to the irradiator user when the user is next to the irradiator; or</li> </ul>								
	D.	). If a room monitor is not installed, have available a calibrated and operable survey meter which will be used to:								
		<ul> <li>(i) Determine the radiation level at the irradiator door when the door is closed; and</li> <li>(ii) Check for any increase in radiation levels each time the irradiator door is opened.</li> </ul>								

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			MATER SUPPLE	IALS LIC		E T			ocket or Refer	rence Num	nber				
								A	Amendmen	nt No. 10	06				
	E. If abnormal radiation levels or any malfunctions of the licensee shall cease using the irradiator, restrict acce immediately notify the Radiation Safety Officer, and s 10 CER Parts 20, 21 or 20.								rradiator ar to the are omit all rep	re detec a housi oorts rec	ted at a ng the ii juired ur	ny tin rradia nder	ne, the tor,	e	
	F.	<ul> <li>Not repair or authorize repairs of the irradiator except by the manufacturer or other persons specifically authorized by the U.S. Nuclear Regulatory Commission or an Agreement State to perf such services.</li> </ul>										erform			
22./	22.A. Detector cells containing a titanium tritide foil or a scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents the foil temperatures from exceeding that specified in the certificate of registration referred to in 10 CFR 32.210.								il						
	В.	When in the outsi	i use, dete ide.	ctor cells	contai	ning a ti	tanium trit	ide	foil or a so	candium	tritide f	oil sh	all be	ven	ted to
23.	The dec	licensee ay-in-stora	is author rage befo	zed to ho e disposa	ld radio al in orc	bactive r dinary tra	material wi ash, provic	ith a ded	a physical I :	half-life	of less t	than '	120 da	ays f	or
	A.	Waste to	o be dispo	sed of in	this ma	anner sh	hall be held	d fo	r decay a r	minimur	n of ten	half-	ives.		
	B.	. Before disposal as ordinary trash, the waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.								all be					
	C.	. A record of each such disposal permitted under this License Condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.								e /as e rate, vho					
24.	The licensee shall submit a revised Decommissioning Funding Plan that includes all licensed locations and activities, by March 1, 2003 or ninety days following completion of the decommissioning of building 124 at the New Brunswick, New Jersey location, whichever occurs earlier. The Decommissionin Funding Plan shall be sent to the Director, Division of Nuclear Materials Safety, Region I Office referenced in Appendix D of 10 CFR Part 20.									ns oning					
25.	The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."														

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26.	Except as spec accordance wit any enclosures the statements more restrictive A. Letter date B. Letter date C. Letter date D. Letter date G. Letter date H. Letter date J. Letter date J. Letter date M. Letter date C. Letter date M. Letter date	cifically provided otherwise in th h the statements, representations is listed below. The U.S. Nuclea , representations and procedur e than the regulations. and March 23, 1992 and May 8, 1992 and May 8, 1992 and February 17, 1994 and ated February 18, 1997 and August 26, 1997 and August 26, 1997 and August 29, 1997 and August 19, 1998 and August 19, 2001 and August 19, 2001 and August 19, 2001 and August 19, 2002 and December 16, 2002, with attack and March 19, 2003	is license, thons, and pro ar Regulator es in the lice <b>RE</b> missioning achment hment	<text></text>						
			For the U.S	S. Nuclear Regulatory Commission						
Date	e <u>May_15, 2</u> (	203	By	iginal signed by Elizabeth Ullrich						
			Re	gion I g of Prussia, Pennsylvania 19406						