



HUMAN HEALTH | ENVIRONMENTAL HEALTH

PerkinElmer, Inc. Phone 630.969.6000
2200 Warrenville Road Fax 630.322.5511
Downers Grove, IL 60515 www.perkinelmer.com
USA

February 18, 2011

Office of Federal & State Materials and
Environmental Management Programs
Division of Materials Safety and State Agreements
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Attn: Richard K. Struckmeyer

Docket #: 030-13133
Mail Control #: 574199
License # 12-04933-06E

Dear Mr. Struckmeyer:

In accordance with your instructions provided in the letter dated January 31, 2011, we have developed an entirely new application for our renewal following the instructions provided in NUREG-1556, vol. 8.

We believe that this application should be complete and meets the requirements provided in the NUREG. If you have any further questions or need further information you can contact me for assistance at 630-322-5202.

Sincerely,

A handwritten signature in black ink that reads 'R. Haines'.

Rick Haines
RSO

NRC FORM 313
(3-2009)
10 CFR 30, 32, 33,
34, 35, 38, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 3/31/2012

APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), 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.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19408-1415

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
612 E LAMAR BOULEVARD, SUITE 400
ARLINGTON, TX 78011-4125

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1 THIS IS AN APPLICATION FOR (Check appropriate item)

- A. NEW LICENSE
- B. AMENDMENT TO LICENSE NUMBER
- C. RENEWAL OF LICENSE NUMBER **12-04933-06E**

2 NAME AND MAILING ADDRESS OF APPLICANT (include ZIP code)

**PerkinElmer
2200 Warrenville Road
Downers Grove, Illinois 60515**

3 ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

**2200 Warrenville Road
Downers Grove, Illinois 60515**

4 NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Rick Haines, rick.haines@perkinelmer.com

TELEPHONE NUMBER

(630) 322-5202

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

9. FACILITIES AND EQUIPMENT

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY **31** AMOUNT ENCLOSED \$

13. CERTIFICATION (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 38, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 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.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

Rick Haines, Radiation Safety Officer

SIGNATURE

DATE

FOR NRC USE ONLY

TYPE OF FEE FEE LOG FEE CATEGORY AMOUNT RECEIVED CHECK NUMBER COMMENTS

APPROVED BY

DATE

February 18, 2011

Office of Federal & State Materials and
Environmental Management Programs
Division of Materials Safety and State Agreements
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Attn: Richard K. Struckmeyer

Docket #: 030-13133
Mail Control #: 574199
License # 12-04933-06E

Dear Mr. Struckmeyer:

In accordance with your instructions provided in the letter dated January 31, 2011, we have developed an entirely new application for our renewal following the instructions provided in NUREG-1556, vol. 8.

We believe that this application should be complete and meets the requirements provided in the NUREG. If you have any further questions or need further information you can contact me for assistance at 630-322-5202.

Sincerely,

Rick Haines
RSO

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or Physical form	8. Maximum amount that license may possess at any one time under this license.
As specified in section 30.71, schedule B, 10CFR Part 30	Check sources and calibration standards	See list below. Total possession limit controlled by IEMA license.

LIQUID SCINTILLATION STANDARDS:

PART #	ISOTOPE		DESCRIPTION	ACTIVITY
6008401	H ³	Liquid	³ H Quenched Series, 5 ml	1.40 uCi
6008402	C ¹⁴	Liquid	¹⁴ C Quenched Series, 5 ml	0.70 uCi
6008400	H ³ /C ¹⁴	Liquid	Set of Unquenched Std., 5 ml 6008411, 6008412 & 6008413	0.14 uCi (³ H) 0.07 uCi (¹⁴ C)
6008411		Liquid	Unquenched Background Std., 5 ml	None
6008412	H ³	Liquid	Unquenched ³ H Std., 5 ml	0.14 uCi
6008413	C ¹⁴	Liquid	Unquenched ¹⁴ C Std., 5 ml	0.07 uCi
6008501	H ³	Liquid	³ H Quenched Series, 15 ml	1.40 uCi
6008502	C ¹⁴	Liquid	¹⁴ C Quenched Series, 15 ml	0.70 uCi
6008500	H ³ /C ¹⁴	Liquid	Set of Unquenched Std., 15 ml 6008511, 6008512 & 6008513 (1215-111 set equivalent)	0.14 uCi (³ H) 0.07 uCi (¹⁴ C)
6008512	H ³	Liquid	Unquenched ³ H Std., 15 ml	0.14 uCi
6008513	C ¹⁴	Liquid	Unquenched ¹⁴ C Std, 15 ml	0.07 uCi
6018551	H ³	Liquid	³ H Ext. Range Quenched Std., 5 ml	1.40 uCi
6018552	C ¹⁴	Liquid	¹⁴ C Ext. Range Quenched Std., 5 ml	0.70 uCi
6018594	H ³	Liquid	³ H Ext. Range Quenched Std, 15 ml	1.40 uCi
6018595	C ¹⁴	Liquid	¹⁴ C Ext. Range Quenched Std, 15 ml	0.70 uCi
6018911	H ³	Liquid	³ H Unq. Low Level Std., 10 ml	0.04 uCi
6018912	C ¹⁴	Liquid	¹⁴ C Unq. Low Level Std., 10 ml	0.02 uCi
6018914	H ³ /C ¹⁴	Liquid	Set of Unq. Low Level Std., 10 ml 6018911, 6018912 & 6018913	0.04 uCi (³ H) 0.02 uCi (¹⁴ C)
6018917	H ³	Liquid	³ H Low Level Quenched Series, 15 ml	0.14 uCi
6018918	C ¹⁴	Liquid	¹⁴ C Low Level Quenched Series, 15 ml	0.10 uCi
6007600	H ³	Liquid	³ H Ultima Gold Quenched Series, 15 ml	1.40 uCi
6007601	C ¹⁴	Liquid	¹⁴ C Ultima Gold Quenched Series, 15 ml	0.70 uCi
6007603	H ³	Liquid	³ H Ultima Gold Quenched Series, 5 ml	1.40 uCi
6007604	C ¹⁴	Liquid	¹⁴ C Ultima Gold Quenched Series, 5 ml	0.70 uCi
6010704	H ³	Liquid	³ H Ult. Gold Low Level Quenched, 15 ml	0.40 uCi
6010705	C ¹⁴	Liquid	¹⁴ C Ult. Gold Low Level Quenched, 15 ml	0.20 uCi

PICO CALIBRATORS:

PART #	ISOTOPE		DESCRIPTION	Activity
5080125	I-125	Solid	I-125 PICO Calibrator (Set/1)	0.091 uCi
5080225	I-125	Solid	I-125 PICO Calibrator (Set/2)	0.182 uCi
5080325	I-125	Solid	I-125 PICO Calibrator (Set/3)	0.273 uCi
5080425	I-125	Solid	I-125 PICO Calibrator (Set/4)	0.364 uCi
5080525	I-125	Solid	I-125 PICO Calibrator (Set/5)	0.455 uCi
5080625	I-125	Solid	I-125 PICO Calibrator (Set/6)	0.546 uCi
5081025	I-125	Solid	I-125 PICO Calibrator (Set/10)	0.910 uCi
5081225	I-125	Solid	I-125 PICO Calibrator (Set/12)	1.092 uCi
5081525	I-125	Solid	I-125 PICO Calibrator (Set/15)	1.365 uCi
5081625	I-125	Solid	I-125 PICO Calibrator (Set/16)	1.456 uCi
5082025	I-125	Solid	I-125 PICO Calibrator (Set/20)	1.820 uCi
5082425	I-125	Solid	I-125 PICO Calibrator (Set/24)	2.184 uCi
5082525	I-125	Solid	I-125 PICO Calibrator (Set/25)	2.275 uCi
5080129	I-129	Solid	I-129 PICO Calibrator (Set/1)	0.050 uCi
5080229	I-129	Solid	I-129 PICO Calibrator (Set/2)	0.100 uCi
5080329	I-129	Solid	I-129 PICO Calibrator (Set/3)	0.150 uCi
5080429	I-129	Solid	I-129 PICO Calibrator (Set/4)	0.200 uCi
5080529	I-129	Solid	I-129 PICO Calibrator (Set/5)	0.250 uCi
5080629	I-129	Solid	I-129 PICO Calibrator (Set/6)	0.300 uCi
5081029	I-129	Solid	I-129 PICO Calibrator (Set/10)	0.500 uCi
5081229	I-129	Solid	I-129 PICO Calibrator (Set/12)	0.600 uCi
5081529	I-129	Solid	I-129 PICO Calibrator (Set/15)	0.750 uCi
5081629	I-129	Solid	I-129 PICO Calibrator (Set/16)	0.800 uCi
5082029	I-129	Solid	I-129 PICO Calibrator (Set/20)	1.000 uCi
5082429	I-129	Solid	I-129 PICO Calibrator (Set/24)	1.200 uCi
5082529	I-129	Solid	I-129 PICO Calibrator (Set/25)	1.250 uCi
5080157	Co-57	Solid	Co-57 PICO Calibrator (Set/1)	0.091 uCi
5080257	Co-57	Solid	Co-57 PICO Calibrator (Set/2)	0.182 uCi
5080357	Co-57	Solid	Co-57 PICO Calibrator (Set/3)	0.273 uCi
5080457	Co-57	Solid	Co-57 PICO Calibrator (Set/4)	0.364 uCi
5080557	Co-57	Solid	Co-57 PICO Calibrator (Set/5)	0.455 uCi
5080657	Co-57	Solid	Co-57 PICO Calibrator (Set/6)	0.546 uCi
5081057	Co-57	Solid	Co-57 PICO Calibrator (Set/10)	0.910 uCi
5081257	Co-57	Solid	Co-57 PICO Calibrator (Set/12)	1.092 uCi
5081557	Co-57	Solid	Co-57 PICO Calibrator (Set/15)	1.365 uCi
5081657	Co-57	Solid	Co-57 PICO Calibrator (Set/16)	1.456 uCi
5082057	Co-57	Solid	Co-57 PICO Calibrator (Set/20)	1.820 uCi
5082457	Co-57	Solid	Co-57 PICO Calibrator (Set/24)	2.180 uCi
5082557	Co-57	Solid	Co-57 PICO Calibrator (Set/25)	2.280 uCi
5080151	Cr-51	Solid	Cr-51 PICO Calibrator (Set/1)	0.910 uCi
5080251	Cr-51	Solid	Cr-51 PICO Calibrator (Set/2)	1.820 uCi
5080351	Cr-51	Solid	Cr-51 PICO Calibrator (Set/3)	2.730 uCi
5080451	Cr-51	Solid	Cr-51 PICO Calibrator (Set/4)	3.640 uCi
5080551	Cr-51	Solid	Cr-51 PICO Calibrator (Set/5)	4.550 uCi
5080651	Cr-51	Solid	Cr-51 PICO Calibrator (Set/6)	5.460 uCi
5081051	Cr-51	Solid	Cr-51 PICO Calibrator (Set/10)	9.100 uCi
5081251	Cr-51	Solid	Cr-51 PICO Calibrator (Set/12)	10.920 uCi
5081551	Cr-51	Solid	Cr-51 PICO Calibrator (Set/15)	13.650 uCi
5081651	Cr-51	Solid	Cr-51 PICO Calibrator (Set/16)	14.560 uCi
5082051	Cr-51	Solid	Cr-51 PICO Calibrator (Set/20)	18.200 uCi
5082451	Cr-51	Solid	Cr-51 PICO Calibrator (Set/24)	21.840 uCi
5082551	Cr-51	Solid	Cr-51 PICO Calibrator (Set/25)	22.750 uCi
6018503	Cs-137	Solid	Cs-137 Calibration Source	0.250 uCi

			(1280-141 equivalent)	
6018504	I-129	Solid	I-129 Calibration Source (1270-102 equivalent)	0.050 uCi
6018505	I-129	Solid	I-129 Calibration Source	0.035 uCi
6018508	I-129	Solid	I-129 Calibration Tray	0.840 uCi
6018512	I-129	Solid	I-129 Matched Pr	0.100 uCi

LSC INTERNAL STANDARD:

6020022	Ba-133	Solid	Ba-133 pellet	1uCi
---------	--------	-------	---------------	------

INTERNAL STANDARDS and SPEC CHECS:

PART #	ISOTOPE		DESCRIPTION	VOL	ACTIVITY
6004051	H ³	Liquid	³ H Toluene	10 ml	10.80 uCi
6004052	H ³	Liquid	³ H Water	10 ml	12.50 uCi
6004062	C ¹⁴	Liquid	¹⁴ C Toluene	10 ml	2.20 uCi
6002134	H ³	Liquid	³ H High DPM Spec Chec	25 ml	19.00 uCi
6002135	C ¹⁴	Liquid	¹⁴ C High DPM Spec Chec	25 ml	11.00 uCi
6002136	H ³	Liquid	³ H Low DPM Spec Chec	25 ml	0.70 uCi
6002137	C ¹⁴	Liquid	¹⁴ C Low DPM Spec Chec	25 ml	0.70 uCi
6002138	H ³ /C ¹⁴	Liquid	High Activity Spec Chec Kit 6002134 - ³ H High DPM 6002135 - ¹⁴ C High DPM	25 ml 25 ml	19.00 uCi 11.00 uCi
6002139	H ³ /C ¹⁴	Liquid	Low Activity Spec Chec Kit 6002136 - ³ H Low DPM 6002137 - ¹⁴ C Low DPM	25 ml 25 ml	0.70 uCi 0.70 uCi

TOPCOUNT CAL/NORM PLATES or INSTANT IMAGER CAL SOURCES:

PART #	ISOTOPE		DESCRIPTION	Activity
7001044	H ³ /C ¹⁴	Liquid	Cal/Norm Plate, 96-Well	5.0 uCi (³ H) 2.0 uCi (¹⁴ C)
7001045	H ³	Liquid	Cal/Norm Plate, 24-Well	5.0 uCi (³ H)
7001068	C ¹⁴	Liquid	Calibration Plate Kit 9600	100.0 uCi (¹⁴ C)
7001129	H ³	Liquid	SPC Norm Plate Kit	25.0 uCi (³ H)
7001173	C ¹⁴	Liquid	Calibrator For Instant Imager	96.0 uCi (¹⁴ C)

MicroBeta & BetaPlate CAL/NORM PLATES or Victor/MultiLabel Plates:

PART #	ISOTOPE		DESCRIPTION	Activity
1450-471	H ³ /C ¹⁴	Liquid	Normalization Standard, MicroBeta2-BOM	0.27 uCi (³ H) 0.16 uCi (¹⁴ C)
1450-478	H ³ /C ¹⁴	Liquid	SSO-Calibration Standard SVC 1450, MicroBeta2-Option	2.40 uCi (³ H) 0.49 uCi (¹⁴ C)
1450-477	H ³	Liquid	Normalization Standard, MicroBeta2- Option	4.80 (³ H)
1450-2020	H ³	Liquid	MicroBeta adjustmnt tool for 384 upgrade, MicroBeta2-Option	2.40 uCi (³ H)
1205-432	H ³	Liquid	Normalization Standard 3H; BetaPlate- Option	0.80 uCi (³ H)
1205-433	C ¹⁴	Liquid	Normalization Standard 14C; BetaPlate- Option	0.46 uCi (¹⁴ C)

1205-438	H ³	Liquid	SSO-Calibration Cass 3H SN.559; for Engineers; BetaPlate Option	1.60 uCi (³ H)
60000774	C ¹⁴	Liquid	2100 Luminescence Adjustment Plate	6.0 uCi (¹⁴ C)
60000128	C ¹⁴	Liquid	Coordinate Adjustment Plate	7.50 uCi (¹⁴ C)
1420-442	C ¹⁴	Liquid	Victor test Plate	6.80 uCi (¹⁴ C)
61003195	C ¹⁴	Liquid	Photometer Test Plate	4.50 uCi (¹⁴ C)
1420-4430	C ¹⁴	Liquid	Victor Light test Plate	6.80 uCi (¹⁴ C)
2009-0030	C ¹⁴	Liquid	Multilabel Test Plate with Photometry & Luminescence	4.50 uCi (¹⁴ C)
2009-0070	C ¹⁴	Liquid	Multilabel Test Plate with Photometry & Luminescence	4.50 uCi (¹⁴ C)

Purpose

The exempt sources that we distributed under this license are used by our clients for quality control procedures on the radiological support equipment. The liquid H-3 and C-14 sources are manufactured on site in our Downers Grove, IL facility. We have radiation safety procedures for the handling/development process and quality control procedures for the distribution and customer product safety and compliance requirements. The Pico Calibrator sources are purchased from "Canberra, Inc." in accordance with our product requirements. The Ba-133 source is a solid source that is installed in some of our equipment. It is used to establish correction factors for calibration, efficiency and sample counting. The source is too small to have engravings therefore the instrument itself has the label affixed when the source is installed.

All of these sources are handled and distributed in as safe a manner as possible to maintain compliance with the regulations and ALARA principles. Each source that is provided to our customers has the required radioactive material label, isotope and activity indicated. A printed certificate is provided to the customer with the radioactive material source and applicable safety information. We have an established return policy for each of our sources that are managed through our IEMA possession license.