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CERTIFIED MAIL – RETURN RECEIPT REQUESTED:
7006 2760 0003 0406 6209

June 12, 2008

United States Nuclear Regulatory Commission
Region III
Nuclear Materials Licensing Branch
2443 Warrenville Road, Suite 210
Lisle, Illinois 60532-4352

Subject: **License Amendment Application**
License No. 21-00627-02

To whom it may concern:

Please find enclosed the Application for the amendment of the BASF Wyandotte, Michigan Site Material License. This submittal contains NRC Form 313 and the required information for items 5 - 11. Listed below are the requested modifications:

1) Add seven new Berthold Technologies fixed gauge sources to our license. These sources will be purchased from the manufacturer in the 3rd quarter of 2008. See Tables B.1 below addressing items 5 and 6 of the NRC Form 313.

2) Add Daniel Hannewald as the alternate Radiation Safety Officer for the current license. Remove Dave Sheaves as the alternate RSO. The proposed alternate RSO's qualifications are attached in item #7 below and copies of training records were included in a separate attachment.

3) Add the following services that may be performed by the RSO or alternate RSO: installation, initial radiation surveys, relocation, removal from service and alignment. Our current license does not allow these individuals to perform such functions.

You can reach me at (734) 324-5282 or email me at derek.hetes@basf.com. with any questions or concerns.

Sincerely,

Derek Hetes
Radiation Safety Officer/ EHS Team Member

BASF Corporation
1609 Biddle Avenue
Wyandotte, MI 48192
Tel: (734) 324-6100
www.basf.com/usa

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Exhibit Items Addressing Parts 5 - 11 Of Material License Application (NRC Form 313)

Table B.1 Items 5 & 6: Materials To Be Possessed and Proposed Uses

Yes	No	Radioisotope	Manufacturer Model No.	Quantity	Use as Listed on SSD Certificate	Other uses not listed on SSD Certificate
X		Cesium-137	Ohmart Model 2000	300 mCi	Yes[x] Specific description of the gauge use: Used in Ohmart SHD source holder for level gauging system.	[x] Not applicable
X		Cesium-137	Kay-Ray/ Sensall Model # 7062B	10 mCi	Yes[x] Specific description of the gauge use: Used in Kay-Ray level gauging system.	[x] Not applicable
X		Cesium-137	Kay-Ray/ Sensall Model # 7062B	10 mCi	Yes[x] Specific description of the gauge use: Used in Kay-Ray level gauging system.	[x] Not applicable
X		Cesium-137	Kay-Ray/ Sensall Model # 7062B	25 mCi	Yes[x] Specific description of the gauge use: Used in Kay-Ray level gauging system.	[x] Not applicable
X		Cesium-137	Kay-Ray/ Sensall Model # 7062B	25 mCi	Yes[x] Specific description of the gauge use: Used in Kay-Ray level gauging system.	[x] Not applicable
X		Cesium-137	Kay-Ray/ Sensall Model # 7062B	25 mCi	Yes[x] Specific description of the gauge use: Used in Kay-Ray level gauging system.	[x] Not applicable
X		Cesium-137	Kay-Ray/ Sensall Model # 7062B	25 mCi	Yes[x] Specific description of the gauge use: Used in Kay-Ray level gauging system.	[x] Not applicable

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100 Campus Drive
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Table B.1 Items 5 & 6: Materials To Be Possessed and Proposed Uses

Yes	No	Radioisotope	Manufacturer Model No. (SSDR)	Quantity	Use as Listed on SSD Certificate	Other uses not listed on SSD Certificate
X		Cesium-137	Thermo Fisher Scientific/ TN Technologies Model 5205	10 mCi	Yes[x] Specific description of the gauge use: Used in Thermo Fisher Scientific/ TN Technologies level gauging system.	[x] Not applicable
X		Cesium-137	Thermo Fisher Scientific/ TN Technologies Model 5205	10 mCi	Yes[x] Specific description of the gauge use: Used in Thermo Fisher Scientific/ TN Technologies level gauging system.	[x] Not applicable
X		Cesium-137	Thermo Fisher Scientific/ TN Technologies Model 5205	10 mCi	Yes[x] Specific description of the gauge use: Used in Thermo Fisher Scientific/ TN Technologies level gauging system.	[x] Not applicable
X		Cesium-137	Thermo Fisher Scientific/ TN Technologies Model 5205	10 mCi	Yes[x] Specific description of the gauge use: Used in Thermo Fisher Scientific/ TN Technologies level gauging system.	[x] Not applicable
New		Cesium-137	Berthold Technologies Model LB300LP (TN-1031-D-104-B)	50 mCi	Yes[x] Specific description of the gauge use: To be used in Berthold Technologies level gauging system.	[x] Not applicable
New		Cesium-137	Berthold Technologies Model LB300LP (TN-1031-D-104-B)	50 mCi	Yes[x] Specific description of the gauge use: To be used in Berthold Technologies level gauging system.	[x] Not applicable

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Table B.1 Items 5 & 6: Materials To Be Possessed and Proposed Uses

Yes	No	Radioisotope	Manufacturer Model No. (SSDR)	Quantity	Use as Listed on SSD Certificate	Other uses not listed on SSD Certificate
New		Cobalt-60	Berthold Technologies Model LB300L (TN-1031-D-104-B)	1.5 mCi	Yes[x] Specific description of the gauge use: To be used in Berthold Technologies level gauging system.	[x] Not applicable
New		Cobalt-60	Berthold Technologies Model LB300L (TN-1031-D-104-B)	2 mCi	Yes[x] Specific description of the gauge use: To be used in Berthold Technologies level gauging system.	[x] Not applicable
New		Cobalt-60	Berthold Technologies Model LB300L (TN-1031-D-104-B)	2 mCi	Yes[x] Specific description of the gauge use: To be used in Berthold Technologies level gauging system.	[x] Not applicable
New		Cobalt-60	Berthold Technologies Model LB300L (TN-1031-D-104-B)	2 mCi	Yes[x] Specific description of the gauge use: To be used in Berthold Technologies level gauging system.	[x] Not applicable
New		Cobalt-60	Berthold Technologies Model LB300L (TN-1031-D-104-B)	2 mCi	Yes[x] Specific description of the gauge use: To be used in Berthold Technologies level gauging system.	[x] Not applicable

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Table B.2 Items 7 through 11: Training, Experience, Facilities and Equipment, Radiation Safety Program, and Waste Disposal

	Training & Experience	Yes	Alternative Procedures Attached
7. Individuals Responsible for Radiation Safety Program and Their Training Experience 7.1 Radiation Safety Officer: **Derek Hetes** Alternate: **Dan Hannewald**	The RSOs have completed Radiation Safety Training consistent with criteria in NUREG-1556 Vol. 4, October 1998. **AND** Before being named RSO, future RSO's will have successfully completed training consistent with criteria in NUREG-1556 Vol. 4, October 1998. Within 30 days of naming a new RSO, we will submit the new RSO's name to NRC to include in our License.	[X]	[ ]
7. Individuals Responsible for Radiation Safety Program and Their Training and Experience 7.2 Authorized Users	PROPOSED AUTHORIZED USERS: Before using licensed materials, authorized users will have successfully completed the training described in Criteria in the section titled Authorized Users in NUREG-1556, Vol. 4 dated October 1998.	[X]	[ ]
8. Training for Individuals in the Course of Employment are Likely to Receive doses in Excess of 100 mRem/ yr	No Occupational Exposures in excess of 100 mRem per year are expected for any of the BASF Wyandotte Site employees.		
9. Facilities and Equipment	We will ensure that the location of each fixed gauge meets the Criteria in the section entitled "Facilities and Equipment" in NUREG-1556, Vol. 4 dated October 1998.	[X]	[ ]
10. Radiation Safety Program - Survey Instruments	We will use instruments that meet the Criteria in the section entitled "Radiation Safety Program - Instruments" in NUREG-1556, Vol. 4 dated October 1998 and each survey meter will be calibrated by the manufacturer or other person authorized by the NRC or an Agreement State to perform survey meter calibrations.	[X]	[ ]
10. Radiation Safety Program - Material Receipt and Accountability	Physical inventories will be conducted at intervals not to exceed 6 months or at other intervals approved by the NRC, to account for all sealed sources and devices received and possessed under the license.	[X]	[ ]
10. Radiation Safety Program - Occupational Dosimetry	We will perform a prospective evaluation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10CFR Part 20 or we will provide dosimetry that meets the Criteria	[X]	[ ]

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	in the section entitled, " Radiation Safety Program - Occupational Dosimetry," in NUREG-1556, Vol. 4 dated October 1998.		
10. Radiation Safety Program - Operating and Emergency Procedures	Operating and emergency procedures have been developed, implemented, maintained and distributed that meet Criteria in the section entitled "Radiation Safety Program - Operating and Emergency Procedures" in NUREG-1556, Vol. 4 dated October 1998.	[X]	[ ]
10. Radiation Safety Program - Leak Test	Leak tests will be performed at intervals approved by the NRC and specified in the Sealed Source and Device Registration Certificate. Leak tests will be performed by using a leak test kit supplied by an organization authorized by NRC to provide leak test kits to other licenses and according to the kit supplier's instructions.	[X]	[ ]
10. Radiation Safety Program - Maintenance	ROUTINE MAINTENANCE We have implemented and maintain procedures for routine maintenance of our fixed gauges according to each manufacturers or distributor's written recommendations and instructions. NON-ROUTINE MAINTENANCE The gauge manufacturer, distributor, RSO or other person authorized by the NRC or Agreement State will perform non-routine operations such as installation, initial radiation survey, alignment, gauge relocation or removal of gauge from service. **AND** The gauge manufacturer, distributor or other person authorized by the NRC or Agreement State will perform non-routine operations such as repair and maintenance of components related to the radiological safety of the gauge, replacement and disposal of sealed sources.	[X]	
10. Radiation Safety Program – Fixed Gauge Use at Temporary Sites	Not applicable to our Program		[X]Not Applicable
11. Waste Mmgt.	No response required.		

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Certificate of Training

This is to certify that

Daniel G. Hannewald

Has successfully completed general awareness, function-specific, and safety training applicable to the transport of nuclear gauging devices, and has been tested on these subjects as required by 49CFR172 Subpart H.

Date Issued: March 16, 2007 Expires: March 16, 2010

ThermoFisher
SCIENTIFIC

1410 Gillingham Lane, Sugar Land, TX 77478

Ralph S. Heyer, Radiation Training Manager

Certificate of Training

This is to certify that

Daniel G. Hannewald

Has Successfully Completed

A 40-Hour Radiation Safety Training Course

Presented by Thermo Electron

Date Issued: March 16, 2007

ThermoFisher
SCIENTIFIC

1410 Gillingham Lane, Sugar Land, Texas 77478

Ralph S. Heyer, Radiation Training Manager

NRC FORM 313 (10-2005) 10 CFR 30, 32, 33, 34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR MATERIALS LICENSE

APPROVED BY OMB: NO. 3150-0120 **EXPIRES: 10/31/2008**

Estimated burden per response to comply with this mandatory collection request: 4.4 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@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:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
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 19406-1415

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
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-4005

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 **21-00627-02**
- ☐ C. RENEWAL OF LICENSE NUMBER

2. NAME AND MAILING ADDRESS OF APPLICANT *(Include ZIP code)*

BASF Corporation
1609 Biddle Ave.
Wyandotte, MI 48192

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

BASF Corporation
1609 Biddle Ave.
Wyandotte, MI 48192

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Derek Hetes/ Radiation Safety Officer

TELEPHONE NUMBER

(734) 324-5282

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 **none** | AMOUNT ENCLOSED $ **0.00**

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, 39, 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	SIGNATURE	DATE
Derek Hetes/ Radiation Safety Officer		**06/12/2008**

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			$		
APPROVED BY				DATE	

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02 1P $005.49⁰
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Nuclear Materials Licensing
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