

September 19, 2013

U.S. Nuclear Regulatory Commission
Region 1
2100 Renaissance Bldv, Suite 100
King of Prussia, PA 19406-2713

Ref: Docket 030-38417
License # 06-24000-01 E
Mail Code 580556

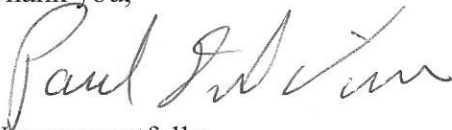
REC RG 10923-13M1004

To Whom it May Concern,

Smiths Detection Inc., with offices at 21 Commerce Drive, Danbury, Connecticut 06810, respectfully request a license amendment for License No. 06-24000-01 E to include distribution from Smiths Detection Inc. facilities located in Edgewood and Ijamsville Maryland consistent with the licenses for those facilities, as amended. Please see attached Maryland State Radioactive Materials License Numbers (Edgewood) MD-25-044-01 and (Ijamsville) MD-21-058-01. Consistent with this request, we hereby attach NRC Form 313, which also addresses this request.

Please do not hesitate to contact me directly if you require any additional information concerning this proposed amendment.

Thank you,



Very respectfully,

Paul DelVisco.
Director of Operations/ Site Manager/ Danbury



**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 Information 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. *AMENDMENTS/RENEWALS THAT INCREASE THE SCOPE OF THE EXISTING LICENSE TO A NEW OR HIGHER FEE CATEGORY WILL REQUIRE A FEE.

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
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PA 19406-2713

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
1600 E. LAMAR BOULEVARD
ARLINGTON, TX 76011-4511

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 06-24000-01 E
- C. RENEWAL OF LICENSE NUMBER _____

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

Smiths Detection, Inc.
21 Commerce Drive
Danbury, Connecticut 06810

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Smiths Detection, Inc.
21 Commerce Drive
Danbury, Connecticut 06810
Smiths Detection, Inc. Facilities located in Edgewood and
Ijamsville Maryland

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Gary Shelton

BUSINESS TELEPHONE NUMBER

8657381017

BUSINESS CELLULAR TELEPHONE NUMBER

8652305574

BUSINESS EMAIL ADDRESS

gary.shelton@smithsdetection.com

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 (Fees required only for new applications, with few exceptions*) (See 10 CFR 170 and Section 170.31)

FEE CATEGORY

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, 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

Gary Shelton/ Radiation Safety Officer

SIGNATURE

DATE

9/30/03

FOR NRC USE ONLY

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

APPROVED BY

DATE



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101 • www.mde.state.md.us

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Anthony G. Brown
Lieutenant Governor

JUL 11 2013

John Volz, Radiation Safety Officer
Smith Detection-Edgewood, Inc.
2202 Lakeside Boulevard
Edgewood, MD 21040

RE: Radioactive Material License #MD-25-044-01

Dear Mr. Volz:

Your requested amendment to radioactive materials license number MD-25-044-01 is enclosed. Please review it carefully to ensure that it reflects all modifications included in your letter received in this office on dated July 2, 2013.

Should you require further assistance, please contact Mr. Raymond E. Manley at 410-537-3301. You may also reach our office toll-free by dialing 1-800-633-6101 and requesting extension 3301. Also, you may contact this office via facsimile at 410-537-3198.

Sincerely,

Roland G. Fletcher, Program Manager IV
Radiological Health Program
Air and Radiation Management Administration


RGF/REM/BJP/cc

Enclosures: License amendment (38)
Code (03240)



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www.mde.state.md.us

TTY Users 1-800-735-2258
Via Maryland Relay Service



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Pursuant to the Maryland Radiation Act, 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 radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. The license is subject to all applicable rules, regulations and orders of the Maryland State Department of the Environment, now or hereinafter in effect and to any conditions specified below.

1. Name: Smith Detection-Edgewood Inc.
2. Address: 2202 Lakeside Boulevard.
Edgewood, Maryland 21040

3. License No.: MD-25-044-01
4. Amendment No.: 38 Code (03240)
5. Expiration Date: July 31, 2014

6. Radioactive material (element and mass number)

A. Nickel-63

B. Nickel-63

C. Nickel-63

7. Chemical and/or physical form

A. Foils (#NBC.13, NBC.14, NBC.11, IPL NEN NER 004) and electroplated devices IPL NEN or Amersham per ETG Part #5-15-11143), **Nuclear Radiation Development, Inc. (NRD) model N1001, Eckert & Ziegler model NBCB10159**

B. Beta ionizing ring source per U.S. Army Drawing #4D/442-416 NEN NER-004R, Amersham #NBCD), **Nuclear Radiation Development, Inc. (NRD) model N1001, Eckert & Ziegler model NBCB10159**

C. Sealed sources: IPL NER 004R, Amersham NBC, NBCQ8681, Nuclear Radiation Development, Inc. (NRD) model N1001

8. Maximum amount of activity which licensee may possess at any one time

A. No source to exceed 25 millicuries. Total possession 3 Curies.

B. No source to exceed 15 millicuries. Total possession 45 Curies.

C. No source to exceed 15 millicuries. Total possession 60 Curies.



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

License Number: MD-25-044-01

Amendment Number: 38

D. Nickel-63	D. Sealed sources: IPL NER 004R, Amersham NBC, NBCQ8681, Nuclear Radiation Development, Inc. (NRD) model N1001	D. No source to exceed 15 millicuries. Total possession 15 Curies.
E. Americium-241	E. Sealed Sources: NRD, Inc. Foil source model A-001	E. Total possession 3 millicuries, no source to exceed 300 microcuries.
F. Phosphorus-32	F. Labeled Compounds	F. 40 millicuries
G. Phosphorus-33	G. Labeled Compounds	G. 40 millicuries
H. Nickel-63	H. Sealed sources: IPL NER 004R, Amersham NBC, NBCQ8681, Nuclear Radiation Development, Inc. (NRD) model N1001	H. 3300 millicuries
I. Cobalt -57	I. Eckert & Ziegler model CO730150001M, capsule assembly A3015	I. 1.0 millicurie
J. Cesium-137	J. Eckert & Ziegler model CS7P030001M-X, capsule assembly P03	J. 1.0 millicurie
K. Cobalt-60	K. Eckert & Ziegler model CO030150001M, capsule assembly A3015	K. 1.0 millicurie
L. Barium-133	L. Eckert & Ziegler model BA330150001M, capsule assembly A3015	L. 1.0 millicurie
M. Americium-241	M. Eckert & Ziegler model AM1.G10-1M-X, capsule assembly G10	M. 2.5 millicuries
N. Californium-252	N. QSA Global model CVN.CYn	N. 50 microcuries



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

License Number: MD-25-044-01

Amendment Number: 38

O. Sodium-22

O. Sealed sources: Eckert and Ziegler model SKRB 17540, model no. VZ-3549-004, Symetrica part#410-0011 and Eckert and Ziegler model SKRB 18147, model no. VZ-3549-004, Symetrica part#410-0011

O. No source to exceed 16 picocuries; maximum possession limit 10 millicuries

9. Authorized Use(s):

- A. For use in development of analytic instruments for atmospheric contamination monitoring, **explosive detection, drug detection, detection of other items and for demonstration and marketing purposes.**
- B. For use in manufacturing and distribution of analytical instruments to specifically licensed recipients.
- C. For use in manufacturing and distribution, of Smiths Detection Models CAM (2429200), ICAM (2429201), CAM2 (0482-0301R), ICAM -APD (2427601), Fixed site CW detector (2429131), APD 2000 (2428800-10, -20 and -30), M43-APD (2428980), CAM 1.5, OTTO-2 (0603-0001), GID-2A (0482-0301R), GID- 3/M22/ACADA (P0614-2000A), GID-3 24/7 (10505), ECAM (1035-5725), Sabre 2000 (4811500), Ionscan 400B, Sentinel II (4814000), Centurion (4813700), and MCAD (P05284) chemical warfare agent detector systems, under COMAR 26.12.01.01 Section C.28(d) to generally licensed recipients under C.22(d).
- D. **For distribution as exempt products: Ionscan Series, Ionscan DT Series and Sabre Series, Sabre Centurion Series and Sentinel Series as described in sealed source registry number NR-0163- D-102-E. Distribution is authorized pursuant to NRC distribution license 19-24009-0E being active and showing the address of this license as an authorized distribution location.**
- E. For distribution of M43A1 to specifically-licensed recipients. For development and testing of systems that have the M43A1 as a component of the system.
- F. & G. For biotechnology research and development at the address in item 2 only. No human or animal use is authorized.
- H. For receipt decommissioning, and storage for ultimate disposal of Smiths Detection Models CAM (2429200), ICAM (2429201), CAM2 (0482-0301R), ICAM -APD (2427601), Fixed site CW detector (2429131), APD 2000 (2428800-10, -20 and -30), M43-APD (2428980), CAM 1.5, OTTO-2 (0603-0001), GID-2A (0482-0301R), GID- 3/M22/ACADA (P0614-2000A), GID-3 24/7 (10505), ECAM (1035-5725), Sabre 2000 (4811500), Ionscan 400B, Sentinel II (4814000), Centurion (4813700), and MCAD (P05284) chemical warfare agent detector systems.



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Page 4 of 7

License Number: MD-25-044-01

Amendment Number: 38

- I - N For research and development. No human or animal use is authorized.
- O. For training, demonstration, testing, repair, manufacturing, research and development, and distribution of the Smiths Detection RadSeeker, pursuant to NRC distribution licenses 19-240009-01E and NR -23918-01E being active and showing the address of this license as an authorized use and distribution location for this device.

LICENSE CONDITIONS

10. The authorized place of use is the licensee's address stated in Item 2, and 2203 Lakeside Boulevard, Edgewood, Maryland 21040, with use, demonstration, and repair at temporary job sites throughout the State of Maryland. The licensee must notify the Radiological Health Program 30 days prior to vacating a permanent use address as is required by Section D.1301 of COMAR 26.12.01.01.
- 11A. The radiation protection program shall be under the supervision of John Volz assisted by Doug Hopkins.
- 11B. Radioactive material shall be used by, or under the supervision of John Volz, Doug Hopkins, Jason Conway, Paul Madairy and **Dan Masi**.
12. The licensee shall comply with all appropriate provisions of COMAR 26.12.01.01 "Regulations for Control of Ionizing Radiation."
- 13A. Each sealed source containing radioactive material, other than Hydrogen-3 with a half-life greater than thirty (30) days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested. If there is reason to suspect that a sealed source might have been damaged, or might be leaking, it shall be tested for leakage before further use.
- 13B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of a device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate.
- 13C. Records of leak tests shall be kept in units of microcuries and maintained for inspection by the Department.
- 13D. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Administrator, Radiological Health Program, 1800 Washington Blvd, Baltimore, Maryland 21230, describing the equipment involved, the test results, and the corrective action taken.



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

License Number: MD-25-044-01

Amendment Number: 38

LICENSE CONDITIONS, CONTINUED

- 13E. Test for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Department, the U.S. Nuclear Regulatory Commission or another Agreement State to perform such services.
- 14. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for three (3) years from the date of the inventory for inspection by the Department, and shall include the quantities and kinds of radioactive material, location of sealed sources, and the date of the inventory.
- 15. The licensee shall report to the Department all transfers of the devices distributed under this license to persons generally licensed under Section C.22(d) in accordance with Section C.28(d)(4). Such reports shall identify each general licensee by name and address, the type of device transferred, the quantity and type of radioactive material contained in the device, and specific location where each device is installed. The report shall be submitted within 30 days after the end of each calendar quarter in which any such device is transferred to a generally licensed person.
- 16. The licensee shall test each device distributed under this license for leakage or contamination of radioactive material and proper operation of the "on-off" mechanism and indicator, if any, at the time of installation of the device.
- 17A. The licensee shall not make any false statement, representation, or certification in any application, record, report, plan, or other document regarding radiation levels, tests performed or radiation safety conditions or practices. Additionally, the licensee shall not falsify, tamper with, or render inaccurate any monitoring device or method.
- 17B. Violation of any term, condition, or regulation could subject the licensee to administrative or civil penalty or criminal prosecution, as specified in Title 8, Radiation, of the Article Environment of the Annotated Code of Maryland.
- 18. Conditions for working at temporary job sites are:
 - A. The work area is to be controlled by limiting access only to authorized personnel and Radioactive Materials signs are to be posted in the work area.
 - B. Work will be done only by trained Smiths Detection personnel.
 - C. The work will consist of refurbish, replace, or repair of component items, assemblies, subassemblies, modules and pieces, not to include opening the IMS Cell containing the radioactive source.
 - D. A leak test will be conducted and approved before final release of the equipment to the user.
 - E. When the work is performed at temporary job sites, all devices will remain in the user's possession at all times.



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

License Number: MD-25-044-01

Amendment Number: 38

LICENSE CONDITIONS, CONTINUED

19. **The licensee is authorized to transport licensed material in accordance with the provisions of COMAR 26.12.01.01, Section T.**
20. The licensee shall not transfer ownership and/or control of this license to any person or entity without providing required information regarding the transfer for the agency's review and without receiving written authorization for the transfer by the agency.
21. As per letters with attachments dated February 23, 2010 and May 6, 2010, requesting decommissioning activities, the licensee is permitted to receive, decommission, and store for ultimate disposal, items listed in 6,7,8, & 9H. Decommissioning activities shall not commence until the Agency has received and approved financial assurance submitted by the licensee.
22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material authorized by this license in accordance with statements representations, and procedures contained in:
 - Renewal application dated October 9, 2006.
 - Letter with attachments dated April 25, 2007.
 - Letter dated December 13, 2007, with attached SSD registration adding distribution of the Sabre 4000 and the Ionscan 500DT.
 - Letter dated February 18, 2008, with sealed source models and possession limits.
 - Letter dated August 20, 2008, with attached SSD registration adding the M43A1 for testing systems and for distribution to specifically-licensed recipients.
 - Letter dated August 20, 2008, adding the distribution of the generally-licensed MMTD.
 - Amendment application with attachments, dated January 9, 2009, adding P-32 and P-33.
 - Letters with attachments dated February 23, 2010 and May 6, 2010, with decommissioning conditions, increasing the possession limit of nickel-63, deleting Amy Sadera and Ali Kerem, and adding Doug Hopkins, Jason Conway, and Paul Madairy.
 - Letter with attachments dated April 3, 2012 and electronic mail and attachments dated April 23, 2012, adding sealed sources and revising the radiation safety program.



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

License Number: MD-25-044-01

Amendment Number: 38

LICENSE CONDITIONS, CONTINUED

- Electronic mail with attachment replacing page 26 of *Radioactive Materials Code of Practice*.
- Letter with attachment dated November 29, 2012, adding 2203 Lakeside as an address of use for training and repair of IMS detectors, and updating the 2202 Lakeside facility map.
- Letter with attachments dated May 17, 2013, adding Dan Masi as authorized user, adding amended code of practice, increasing possession of Californium-252 to 50 microcuries, adding Nuclear Radiation Development, Inc. (NRD) model N1001, Eckert & Ziegler model NBCB10159 sources,
- Letter dated May 30, 2013, adding the Ionscan Series, Ionscan DT Series and Sabre Series, Sabre Centurion Series and Sentinel Series.
- Letter with attachments dated June 21, 2013, adding Sodium-22
- Letter date July 2, 2013 clarifying use in RadSecker device.

COMAR 26.12.01.01 "Regulations for Control of Ionizing Radiation" shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT

Roland G. Fletcher, Manager IV
Radiological Health Program

July 3, 2013
BJP

BJP
7/3/2013
for 7/10/13



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101 • www.mde.state.md.us

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Anthony G. Brown
Lieutenant Governor

SEP 9 2013

Peter Wallace, Radiation Safety Officer
Smith Detection
9639 Dr. Perry Road, Suite 101N
Ijamsville, MD 21754

RE: Radioactive Material License #MD-21-058-01

Dear Mr. Wallace:

Your requested amendment to radioactive materials license number MD-21-058-01 is enclosed. Please review it carefully to ensure that it reflects all modifications included in your email received in this office on August 13, 2013.

Should you require further assistance, please contact Mr. Raymond E. Manley at 410-537-3301. You may also reach our office toll-free by dialing 1-800-633-6101 and requesting extension 3301. Also, you may contact this office via facsimile at 410-537-3198.

Sincerely,

Roland G. Fletcher, Program Manager IV
Radiological Health Program
Air and Radiation Management Administration

RGF/BJP/CAN/cc

Enclosures: License amendment (01)
Code (03223)





Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Pursuant to the Maryland Radiation Act, 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 radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. The license is subject to all applicable rules, regulations and orders of the Maryland State Department of the Environment, now or hereinafter in effect and to any conditions specified below.

1. Name: Smiths Detection 2. Address: 9639 Dr. Perry Road, Suite 101N Ijamsville, Maryland 21754	3. License No.: MD-21-058-01 4. Amendment Number: 01; Code 03223 5. Expiration Date: February 28, 2019	
6. Radioactive material element & mass number: A. Nickel-63 B. Sodium-22	7. Chemical and/or physical form: A. Sealed source QSA Global Inc, Model NBC Nuclear Radiation Development (NRD) Model N1001 B. Sealed source Sealed sources: Eckert and Ziegler model SKRB 17540, model no. VZ-3549-004, Symetrica part#410-0011 and Eckert and Ziegler model SKRB 18147, model no. VZ-3549-004, Symetrica part#410-0011	8. Maximum amount of radioactivity which licensee may possess at any one time: A. No source to exceed 30 millicuries; Total possession shall not exceed 1 curie B. No source to exceed 16 picocuries; maximum possession limit 10 millicuries

LICENSE CONDITIONS

9. Authorized Use(s):
- A. The licensee is authorized to perform maintenance, service and repair of IMS cells. The licensee shall not open the IMS cells nor any sealed sources. Distribution is not authorized.
 - B. For training, demonstration, testing, repair, manufacturing, research and development of the Smiths Detection RadSeeker, pursuant to NRC distribution licenses 19-240009-01E and NR-23918-01E being active and showing the address of this license as authorized use and location for this device.**
10. Licensed material shall be used only at Item 2 and temporary job sites of the licensee. The licensee must notify the Radiological Health Program 30 days prior to vacating a permanent use address and possess a copy of COMAR 26.12.01.01.



RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

License No.: MD-21-058-01

Amendment Number: 01

CONDITIONS

- 11A. The radiation protection program shall be under the supervision of Peter Wallace.
- 11B. Radioactive material shall be used by or under the supervision of Peter Wallace.
- 12. The licensee shall comply with all appropriate provisions of the Code of Maryland Regulations (COMAR) 26.12.01.01 "Regulations for Control of Ionizing Radiation".
- 13. A. Each sealed source containing radioactive material, other than Hydrogen-3 with a half-life greater than thirty (30) days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested. If there is reason to suspect that a sealed source might have been damaged, or might be leaking, it shall be tested for leakage before further use.
- 13. B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of a device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate.
- 13. C. If the test reveals the presence of 0.005 microcuries or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Administrator, Radiological Health Program, 1800 Washington Boulevard, Suite 750, Baltimore, Maryland 21230, describing the equipment involved, the test results, and the corrective action taken.
- 13. D. Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
- 13. E. Test for leakage and/or contamination shall be performed by Robert R. Hiscock, or by other persons specifically authorized by the Department, the U.S. Nuclear Regulatory Commission or another Agreement State to perform such services.
- 15. Sealed sources containing radioactive material shall not be opened.
- 16. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for three (3) years from the date of the inventory for inspection by the Department, and shall include the quantities and kinds of radioactive material, location of sealed sources, and the date of the inventory.
- 17. Food and beverage containers shall not be discarded in radioactive or normal trash containers in licensee's areas utilizing radioactive materials.



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

License No.: MD-21-058-01

Amendment Number: 01

CONDITIONS

- 18. A. The licensee shall not make any false statement, representation, or certification in any application, record, report, plan, or other document regarding radiation levels, tests performed or radiation safety conditions or practices. Additionally, the licensee shall not falsify, tamper with, or render inaccurate any monitoring device or method.
- 18. B. Violation of any term, condition, or regulation could subject the licensee to administrative or civil penalty or criminal prosecution, as specified in Title 8, Radiation, of the Article Environment of the Annotated Code of Maryland.
- 19. The licensee shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission.
- 20. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material authorized by this license in accordance with statements representations and procedures contained in:
 - Application dated July 26, 2011, with attachments;
 - Letter dated January 6, 2012, with attachments.
 - Email dated February 2, 2012
 - **Letter dated August 12, 2013 and electronic mail dated August 13, 2013, requesting the addition of Sodium-22 for training, demonstrating, testing, repair, manufacturing, research and development of the Smiths Detection RadSeeker.**

COMAR 26.12.01.01 "Regulations for Control of Ionizing Radiation" shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT

Roland G. Fletcher, Program Manager IV
Radiological Health Program
Air and Radiation Management Administration

August 27, 2013

CAN

Handwritten notes:
8/27/2013
9/3/13



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101 • www.mde.state.md.us

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Anthony G. Brown
Lieutenant Governor

SEP 9 2013

Peter Wallace, Radiation Safety Officer
Smith Detection
9639 Dr. Perry Road, Suite 101N
Ijamsville, MD 21754

RE: Radioactive Material License #MD-21-058-01

Dear Mr. Wallace:

Your requested amendment to radioactive materials license number MD-21-058-01 is enclosed. Please review it carefully to ensure that it reflects all modifications included in your email received in this office on August 13, 2013.

Should you require further assistance, please contact Mr. Raymond E. Manley at 410-537-3301. You may also reach our office toll-free by dialing 1-800-633-6101 and requesting extension 3301. Also, you may contact this office via facsimile at 410-537-3198.

Sincerely,

Roland G. Fletcher, Program Manager IV
Radiological Health Program
Air and Radiation Management Administration

RGF/BJP/CAN/cc

Enclosures: License amendment (01)
Code (03223)





Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Pursuant to the Maryland Radiation Act, 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 radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. The license is subject to all applicable rules, regulations and orders of the Maryland State Department of the Environment, now or hereinafter in effect and to any conditions specified below.

1. Name: Smiths Detection 2. Address: 9639 Dr. Perry Road, Suite 101N Ijamsville, Maryland 21754	3. License No.: MD-21-058-01 4. Amendment Number: 01; Code 03223 5. Expiration Date: February 28, 2019	
6. Radioactive material element & mass number: A. Nickel-63 B. Sodium-22	7. Chemical and/or physical form: A. Sealed source QSA Global Inc, Model NBC Nuclear Radiation Development (NRD) Model N1001 B. Sealed source Sealed sources: Eckert and Ziegler model SKRB 17540, model no. VZ-3549-004, Symetrica part#410-0011 and Eckert and Ziegler model SKRB 18147, model no. VZ-3549-004, Symetrica part#410-0011	8. Maximum amount of radioactivity which licensee may possess at any one time: A. No source to exceed 30 millicuries; Total possession shall not exceed 1 curie B. No source to exceed 16 picocuries; maximum possession limit 10 millicuries

LICENSE CONDITIONS

9. Authorized Use(s):
- A. The licensee is authorized to perform maintenance, service and repair of IMS cells. The licensee shall not open the IMS cells nor any sealed sources. Distribution is not authorized.
 - B. For training, demonstration, testing, repair, manufacturing, research and development of the Smiths Detection RadSeeker, pursuant to NRC distribution licenses 19-240009-01E and NR-23918-01E being active and showing the address of this license as authorized use and location for this device.**
10. Licensed material shall be used only at Item 2 and temporary job sites of the licensee. The licensee must notify the Radiological Health Program 30 days prior to vacating a permanent use address and possess a copy of COMAR 26.12.01.01.



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

Page 2 of 3

License No.: MD-21-058-01

Amendment Number: 01

CONDITIONS

- 11A. The radiation protection program shall be under the supervision of Peter Wallace.
- 11B. Radioactive material shall be used by or under the supervision of Peter Wallace.
12. The licensee shall comply with all appropriate provisions of the Code of Maryland Regulations (COMAR) 26.12.01.01 "Regulations for Control of Ionizing Radiation".
13. A. Each sealed source containing radioactive material, other than Hydrogen-3 with a half-life greater than thirty (30) days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested. If there is reason to suspect that a sealed source might have been damaged, or might be leaking, it shall be tested for leakage before further use.
13. B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of a device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate.
13. C. If the test reveals the presence of 0.005 microcuries or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Administrator, Radiological Health Program, 1800 Washington Boulevard, Suite 750, Baltimore, Maryland 21230, describing the equipment involved, the test results, and the corrective action taken.
13. D. Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
13. E. Test for leakage and/or contamination shall be performed by Robert R. Hiscock, or by other persons specifically authorized by the Department, the U.S. Nuclear Regulatory Commission or another Agreement State to perform such services.
15. Sealed sources containing radioactive material shall not be opened.
16. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for three (3) years from the date of the inventory for inspection by the Department, and shall include the quantities and kinds of radioactive material, location of sealed sources, and the date of the inventory.
17. Food and beverage containers shall not be discarded in radioactive or normal trash containers in licensee's areas utilizing radioactive materials.



Department of the Environment

RADIOLOGICAL HEALTH PROGRAM
RADIOACTIVE MATERIAL LICENSE

License No.: MD-21-058-01

Amendment Number: 01

CONDITIONS

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FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT

Roland G. Fletcher, Program Manager IV
Radiological Health Program
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