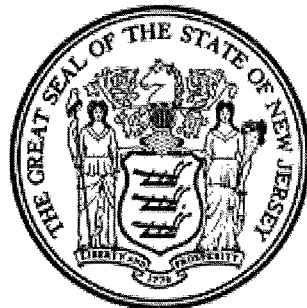




New Jersey Department of Environmental Protection
Bureau of Environmental Radiation
Radioactive Materials Program
Mail Code 25-01
P.O. Box 420
Trenton, NJ 08625-0420
Phone (609) 984-5462
Fax (609) 633-2210



Radioactive Materials License

Pursuant to the Radiation Protection Act (N.J.S.A. 26:2D) and the Radiation Code (N.J.A.C. 7:28, et seq.), as amended, 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(s) 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. This license is subject to all applicable rules, regulations, and orders of the New Jersey Department of Environmental Protection, now or hereafter in effect, and to any conditions specified below.

DOCUMENT INFORMATION

Program Interest (PI) ID: 507837	Issuance Date: 02/17/2012
License Number: 507837 - RAD110005	Expiration Date: 04/30/2012

ADMINISTRATIVE INFORMATION

Licensee Name and Administrative Address SMITHS DETECTION INC 60A COLUMBIA RD MORRISTOWN, NJ 07960	Administrator: Richard Keosian Radiation Safety Officer: Richard Keosian
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PROGRAM INFORMATION

Program Code	Description
03214	Manufacturing and Distribution Other
03220	Leak Test Service Only
03620	Research and Development Other

LICENSE CONDITIONS

This license is subject to the following conditions:

- Section A – Authorized Materials, Form, Limits, Uses & Users
- Section B – Authorized Locations
- Section C – Inventory of Devices and Sources
- Section D – Supporting Documents
- Section E – License Conditions

This license, which shall be effective immediately, is issued on behalf of the Department under the authority of:

Signature: Jenny Goodman
Print Name: Jenny Goodman

02/17/2012
Date

SECTION A – Materials, Form, Limits, Uses & Users

Material	Form	Max Limit	Authorized Uses	Authorized Users
Americium-241	Sealed Source	2500 microcuries	Non-Human Use - Research and development	Richard Keosian Daniel Masi
Barium-133	Sealed Source	1 millicuries		
Californium-252	Sealed Source	20 microcuries	Non-Human Use - Calibration and/or quality assurance.	
Cesium-137	Sealed Source	1 millicuries	Non-Human Use - Research and development	
Cobalt-57	Sealed Source	1 millicuries		
Cobalt-60	Sealed Source	1 millicuries		
Nickel-63	Sealed Source	7500 millicuries	Non-Human Use - Sealed source(s) contained within a fixed device (see device inventory).	
Nickel-63	Sealed Source	15 millicuries	Non-Human Use - Research and development; instruction.	

SECTION B – Authorized Locations

Site ID	Site Name	Street Address	Location Description
415994	SMITHS DETECTION INC @ PATRIOTS PLAZA	60 COLUMBIA RD STE A, Morristown	Storage, Possession, and Use.
NA	TEMPORARY JOBSITES	Temporary job sites wherever New Jersey retains regulatory authority	Possession or Use Only (no storage)

SECTION C – Inventory of Devices and Sources

ID	Device Type	Device Mfg	Device Model #	Device Serial #	Description
1	Ion Generators - Chromatography	Isotope Products Laboratories (IPL)	NER-004	Various	Ni-63 sealed sources at 5 mCi per source.
2	Ion Generators - Chromatography	Amersham	NBC	Various	Ni-63 sealed sources at up to 15 mCi per source for installation into Ion Mobility Spectroscopy devices including: IONSCAN, Sabre, Sabre EXV, Sabre Centurian, Sabre Centurian II, Sentinel II, APD 2000, and MMTD.
3	Ion Generators - Chromatography	NRD, Inc.	N1001	Various	Ni-63 sealed sources at up to 15 mCi per source for installation into Ion Mobility Spectroscopy devices including: IONSCAN, Sabre, Sabre EXV, Sabre Centurian, Sabre Centurian II, Sentinel II, APD 2000, and MMTD
4	Ion Generators - Chromatography	QSA Global, Inc.	CVN.CYn Series	Various	Cf-252 sealed sources of 6 uCi per source
5	Ion Generators - Chromatography	Eckert & Ziegler Isotope Products	C073015001M	A3015	1 mCi Co-57 sealed source.
6	Ion Generators - Chromatography	Eckert & Ziegler Isotope Products	CS7P030001M-X	P03	1 mCi Cs-137 sealed source.
7	Ion Generators - Chromatography	Eckert & Ziegler Isotope Products	CO030150001M	A3015-1	1 mCi Co60 sealed source.
8	Ion Generators - Chromatography	Eckert & Ziegler Isotope Products	BA330150001M	A3015	1 mCi Ba-133 sealed source.
9	Ion Generators - Chromatography	Eckert & Ziegler Isotope Products	AM1.G10-1M-X	G10	2.5 mCi Am-241 sealed source.

SECTION D – Supporting Documents

Doc Type	Title/Description	Date	Contact Name (signature)
Radioactive Material License Application	License Renewal	2/27/2002	Kenneth Wood
Letter	Request to add new location	12/17/2009	Richard Keosian
Letter	Amendment Request	8/27/2010	Richard Keosian
Letter	Amendment to close-out Warren facility	1/5/2011	Richard Keosian
Letter	Amendment New Sources	5/24/2011	Peter Daphnis
Letter	Additional Information	8/8/2011	Richard Keosian
Letter	Service provider request	12/9/2011	Richard Keosian

SECTION E – License Conditions (Requirements Report attached)

SMITHS DETECTION INC
507837 RAD110005 RAD Materials License -Amended License
Requirements Report

Subject Item: PI 507837 -

1. This licensee must confine their use of radioactive materials to the materials, physical forms, maximum possession limits, authorized uses and authorized users listed in section A of this license document. Licensed material shall only be used at the locations and/or within devices specified in sections B and C of this license document and at temporary job sites anywhere in the State of New Jersey where the New Jersey Department of Environmental Protection maintains jurisdiction over radioactive materials. [N.J.A.C. 7:28-51.1]
2. The Radiation Safety Officer (RSO) specified in the Administrative Information section of this license document shall be responsible for ensuring that all individuals using the sealed source(s)/device(s) specified in this license are properly trained in the safe use and handling of the sealed source(s)/material(s). [N.J.A.C. 7:28-51.1]
3. Licensed material shall only be used by, or under the supervision of, the Radiation Safety Officer. [N.J.A.C. 7:28-51.1]
4. Compliance with New Jersey and Federal agencies having jurisdiction and regulations for radioactive materials must be maintained. [N.J.A.C. 7:28-51.1]
5. (A) Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or by an Agreement State. (B) Notwithstanding Paragraph A of this Condition, sealed sources designed to primarily emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months. (C) 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 Commission under 10 CFR 32.210 or by an Agreement State prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested. (D) 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. (E) 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. [N.J.A.C. 7:28-51.1]
6. (A) Sealed source leak tests 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 Department in accordance with N.J.A.C. 7:28-51.1 (10 CFR 30.50(c)(2)) and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Department regulations. (B) Tests for leakage and/or contamination, including leak test sample collection and analysis, shall be performed by the licensee or by other persons specifically licensed by the Department, the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. (C) Records of leak test results shall be kept in units of microcuries and shall be maintained for 3 years. [N.J.A.C. 7:28-51.1]
7. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee. [N.J.A.C. 7:28-51.1]

SMITHS DETECTION INC
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Requirements Report

Subject Item: PI 507837 -

8. The licensee shall conduct a physical inventory every six months, or at other interval approved by the Department, to account for all sealed sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory and shall include radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory. [N.J.A.C. 7:28-51.1]
9. Except for maintaining labeling as required by 10 CFR Part 20 or 71, the licensee shall obtain authorization from the U.S. Nuclear Regulatory Commission before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the respective Registration Certificates issued either by the Commission pursuant to 10 CFR 32.210 or by an Agreement State. [N.J.A.C. 7:28-51.1]
10. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, specified in section D of this license document. [N.J.A.C. 7:28-51.1]
11. The licensee is authorized to transport licensed material only in accordance with the provisions of N.J.A.C. 7:28-61.1 (10 CFR Part 71), Packaging and Transportation of Radioactive Material. [N.J.A.C. 7:28-51.1]
12. This license does not authorize commercial distribution of licensed material to persons generally licensed pursuant to 10 CFR Part 31 or to persons exempt from licensing pursuant to 10 CFR 30.14 through 30.21, inclusive. [N.J.A.C. 7:28-51.1]