



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

September 7, 2007

Docket No. 03035152  
Control No. 140834

License No. 45-25479-01

Doug Wagoner  
President & Chief Operating Officer  
Sentrillion  
1881 Campus Commons Drive, Suite 403  
Reston, VA 20191

SUBJECT: SENTRILLION, LICENSE AMENDMENT, CONTROL NO. 140834

Dear Mr. Wagoner:

This refers to your license amendment request dated July 20, 2007. Enclosed with this letter is the amended license. The facility at 11130 Sunrise Valley Drive, Suite 100, Reston, Virginia, may be released for unrestricted use.

**Your license is written in accordance with current NRC policy and includes new license conditions and significant revisions of old conditions. 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).

Current NRC regulations and guidance are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material**; then **Regulations, Guidance, and Communications**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

Thank you for your cooperation.

Sincerely,

***Original signed by Sattar Lodhi, Ph.D.***

Sattar Lodhi, Ph.D.  
Senior Health Physicist  
Materials Security and Industrial Branch  
Division of Nuclear Materials Safety

D. Wagoner  
Sentrillion

2

Enclosure:  
Amendment No. 02

cc:  
Frederick J. Ford, Radiation Safety Officer

D. Wagoner  
Sentrillion

3

DOCUMENT NAME: C:\FileNet\ML072500333.wpd

**SUNSI Review Complete: SLodhi**

After declaring this document "An Official Agency Record" it will be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	<input type="checkbox"/> N	DNMS/RI	<input type="checkbox"/>	DNMS/RI	<input type="checkbox"/>		<input type="checkbox"/>
NAME	SLodhi/SL							
DATE	9/7/07							

OFFICIAL RECORD COPY

**MATERIALS LICENSE**

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.

<p>Licensee</p> <p>1. Sentrillion</p> <p>2. 1881 Campus Commons Drive, Suite 403 Reston, Virginia 20191</p>	<p>In accordance with the letter dated July 20, 2007,</p> <p>3. License number 45-25479-01 is amended in its entirety to read as follows:</p> <p>4. Expiration date August 31, 2009</p> <p>5. Docket No. 030-35152 Reference No.</p>	
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Cesium 137</p>	<p>7. Chemical and/or physical form</p> <p>A. Sealed Sources (Minnesota Mining and Manufacturing Company Model 4F6S)</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 1.6 curies total</p>
<p>9. Authorized use:</p> <p>A. For possession incident to testing and calibration of Ohmart Corporation Model SH-F2 gauging devices, as service for other persons as defined in 10 CFR 20.1003.</p>		

**CONDITIONS**

10. Licensed material may be used or stored at the licensee's facilities located at LTO Building 54322, Arizona Street, Fort Huachuca, Arizona, and may be used at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material, including areas of exclusive Federal jurisdiction within Agreement States.

If the jurisdiction status of a Federal facility within an Agreement State is unknown, the licensee should contact the Federal agency controlling the job site in question to determine whether the proposed job site is an area of exclusive Federal jurisdiction. Authorization for use of radioactive materials at job sites in Agreement States not under exclusive Federal jurisdiction shall be obtained from the appropriate state regulatory agency.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
45-25479-01Docket or Reference Number  
030-35152

Amendment No. 02

11. Licensed material shall be used by, or under the supervision and in the physical presence of, individuals who have received the training described in the letter dated August 13, 1999.
12. The Radiation Safety Officer for this license is Frederick Jay Ford.
13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed six months or at the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State.
- B. 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 under equivalent regulations of an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received.
- C. 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.
- D. 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.
- E. Tests for leakage and/or contamination, limited to leak test sample collection, shall be performed by the licensee or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. The licensee is not authorized to perform the analysis; analysis of leak test samples must be performed by persons specifically licensed by U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
- F. Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.
14. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
45-25479-01Docket or Reference Number  
030-35152

Amendment No. 02

15. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all 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 the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.
16. A. Each gauge shall be tested for the proper operation of the on-off mechanism (shutter) and indicator, if any, at intervals not to exceed 6 months or at such longer intervals as specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or the equivalent regulations of an Agreement State.
- B. Notwithstanding the periodic on-off mechanism (shutter) and indicator test, the requirement does not apply to gauges that are stored, not being used, and have the shutter lock mechanism in a locked position. The gauges exempted from this periodic test shall be tested before use.
17. The following services shall not be performed by the licensee: installation, initial radiation surveys, relocation, removal from service, dismantling, alignment, replacement, disposal of the sealed source and non-routine maintenance or repair of components related to the radiological safety of the gauge (i.e., the sealed source, the source holder, source drive mechanism, on-off mechanism (shutter), shutter control, shielding). These services shall be performed only by persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
18. A. The licensee may maintain, repair, or replace device components that are not related to the radiological safety of the device and that do not result in the potential for any portion of the body to come into contact with the primary beam or in increased radiation levels in accessible areas.
- B. The licensee may not maintain, repair, or replace any of the following device components: the sealed source, the source holder, source drive mechanism, on-off mechanism (shutter), shutter control, or shielding, or any other component related to the radiological safety of the device, except as provided otherwise by specific condition of this license.
19. The licensee shall operate each device containing licensed material within the manufacturer's specified temperature and environmental limits such that the shielding and shutter mechanism of the source holder are not compromised.
20. The licensee shall assure that the shutter mechanism, for each device containing licensed material, is locked in the closed position during periods when a portion of an individual's body may be subject to the direct radiation beam. The licensee shall review and modify, as appropriate, its "lock-out" procedures whenever a new device is obtained to incorporate the device manufacturer's recommendations.
21. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
45-25479-01Docket or Reference Number  
030-35152

Amendment No. 02

22. 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, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- A. Application dated July 20, 1999
- B. Letter dated August 13, 1999
- C. Letter dated August 28, 2007



For the U.S. Nuclear Regulatory Commission

Date September 7, 2007

By

***Original signed by Sattar Lodhi, Ph.D.***

Sattar Lodhi, Ph.D.  
Materials Security and Industrial Branch  
Division of Nuclear Materials Safety  
Region I  
King of Prussia, Pennsylvania 19406