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

September 12, 2007

Docket No. 030-36136 License No. 29-30779-01
Control No. 140849

Alvin Dietz
Chief Executive Officer
Spectra Gases, Inc.
3434 Route 22 West
Branchburg, NJ 08876

SUBJECT: SPECTRA GASES, INC., LICENSE AMENDMENT, CONTROL NO. 140849

Dear Mr. Dietz:

This refers to your license amendment request. Enclosed with this letter is the amended license.

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.

Note that your application should have been signed by a management representative rather than the Radiation Safety Officer. A letter signed by a management representative indicates that management has reviewed the application and concurs in the statements and representations contained therein. Note also that a management representative should sign all future correspondence that requests a change in your license.

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; 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 Elizabeth Ullrich

Betsy Ullrich
Senior Health Physicist
Commercial and R&D Branch
Division of Nuclear Materials Safety

Enclosure:
Amendment No. 4

cc:
Michael Baselice, Radiation Safety Officer

DOCUMENT NAME: C:\FileNet\ML072570014.wpd

SUNSI Review Complete: EUllrich
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NAME	EUllrich/BU							
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Amendment No. 4

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.

Licensee	
1. Spectra Gases, Inc.	In accordance with the letter dated July 17, 2007, 3. License number 29-30779-01 is amended in its entirety to read as follows:
2. 3434 Route 22 West Branchburg, New Jersey 08876	4. Expiration date December 31, 2012 5. Docket No. 030-36136 Reference No.

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Hydrogen 3	A. Any	A. 75 curies
B. Krypton 85	B. Any	B. 100 curies

9. Authorized use:

A. Research and development as defined in 10 CFR 30.4. Distribution of gas products to persons exempt from licensing in accordance with 10 CFR 30.14.

B. Manufacture of radiochemicals. Packaging and distribution of manufactured radiochemicals to persons authorized to receive the licensed material pursuant to the terms and conditions of specific licenses issued by the U.S. Nuclear Regulatory Commission or any Agreement State.

CONDITIONS

10. Licensed material may be used or stored only at the licensee's facilities located at 320 Mt. Pleasant Avenue, Newark, New Jersey.

11. Licensed material shall be used by, or under the supervision of Michael Baselice, Bill Novak, and Jorge Silva.

12. The Radiation Safety Officer for this license is Michael Baselice.

13. The concentration of hydrogen-3 in gas products at the time of transfer shall not exceed 5×10^{-6} microcuries per milliliter.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

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14. The licensee shall label each tritium product or material distributed under this license as follows: "This product shall not be incorporated in any food, beverage, cosmetic, drug or other commodity or product designed for ingestion or inhalation by, or application to, a human being."

15. The licensee shall maintain records of transfer of tritium material and file a report with the U.S. Nuclear Regulatory Commission, Region 1, identifying the type, quantity and initial concentration of the radionuclide in each product or material at the time of transfer during the reporting period.

    The initial report shall be filed within 30 days of September 30, 2008. Subsequent reports shall be filed within 30 days following

    (a) Five years after filing the preceding report; or

    (b) Filing an application for renewal of this license; or

    (c) Notifying the NRC of the licensee's decision to permanently discontinue activities authorized under this license.

    If no transfers of byproduct material have been made during the reporting period, the report shall so indicate.

16. Licensed material shall not be used in or on human beings.

17. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.

18. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

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19. 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 September 27, 2002 (ML022820257)
    B. Facsimile dated October 30, 2002 (ML023040023)
    C. Facsimile received December 13, 2002 (ML023470488)
    D. Letter dated March 4, 2003 (ML030760319)
    E. Facsimile received March 31, 2003 (ML030940748)
    F. Letter dated August 15, 2003 (ML032330384)
    G. Facsimile dated September 22, 2003 (ML032660348)
    H. Facsimile dated September 25, 2003 (ML032731233)
    I. Letter dated December 8, 2006 (ML063620197)
    J. Letter dated January 26, 2007 (ML070330514)
    K. Letter dated February 23, 2007 (ML070570120)
    L. Letter dated July 17, 2007 (ML072060647)
    M. Letter dated August 27, 2007 (ML072480079)

For the U.S. Nuclear Regulatory Commission

Date September 10, 2007

By ***Original signed by Elizabeth Ullrich***

Elizabeth Ullrich
Commercial and R&D Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406