



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

January 27, 2005

Docket No. 03003759
Control No. 136195

License No. 06-00221-08

John A. Lacadie
Vice President and Chief Technology Officer
Uniroyal Chemical Company, Incorporated
World Headquarters
199 Benson Road
Middlebury, CT 06749-0001

**SUBJECT: UNIROYAL CHEMICAL COMPANY, INCORPORATED, ISSUANCE OF
LICENSE AMENDMENT, CONTROL NO. 136195**

Dear Mr. Lacadie:

This refers to your license amendment request. Enclosed with this letter is the amended license. Please note that as part of this Amendment, in accordance with 10 CFR 30.36, effective February 15, 1996, the expiration date of your license has been extended by a period of five years. Your new expiration date is stated in Item 4 of the license. In addition, the conditions of the license were revised to include the current standard license conditions for the activities authorized under this license.

Your application for renewal of this license should be submitted no later than October 31, 2005. At this time, your license is considered a specific license of broad scope, Type B, (Type B broad license) in accordance with 10 CFR Part 33.11(b). However, the materials listed in Item 6.B. and License Condition 12.A. refer to the 10 CFR 33.100, Schedule A, Column II materials and quantities, which are those authorized for a Type C broad license. License Condition 12.B. raises the authorized quantity of carbon-14 to the quantity authorized for a Type B broad license. When you renew your license, you will be required to comply with all the conditions of a Type B broad license, or you may choose to reduce your authorization to a Type C broad license. You may also find, based on the quantities of licensed materials actually in use at your facility, that a limited scope license would provide sufficient materials and flexibility. Enclosed are two volumes of the "Consolidated Guidance About Materials Licenses": Volume 7, "Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope" and Volume 11, "Program-Specific Guidance About Licenses of Broad Scope". You should use one of these guidance documents in writing your renewal application. If you have any questions about the renewal process, you may contact me by telephone at (610) 337-5040 or by email to exu@nrc.gov.

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.

J. Lacadie
Uniroyal Chemical Company, Incorporated

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An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14).

Please note that on October 25, 2004, the NRC suspended public access to ADAMS, and initiated an additional security review of publicly available documents to ensure that potentially sensitive information is removed from the ADAMS database accessible through the NRC's web site. Interested members of the public may obtain copies of the referenced documents for review and/or copying by contacting the NRC Public Document Room pending resumption of public access to ADAMS. The NRC Public Document Room is located at NRC Headquarters in Rockville, MD, and can be contacted at 800-397-4209 or 301-415-4737 or pdrc@nrc.gov.

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

Enclosures:

1. Amendment No. 30
2. 10 CFR Part 30
3. NUREG-1556, Volume 7
4. NUREG-1556, Volume 11

cc:

Michael H. Gay, Ph.D., Radiation Safety Officer

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DATE	1/27/2005						

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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 style="text-align: center;">Licensee</p> <p>1. Uniroyal Chemical Company, Incorporated World Headquarters</p> <p>2. Benson Road Middlebury, Connecticut 06749</p>	<p>In accordance with the letter dated December 22, 2004,</p> <p>3. License number 06-00221-08 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration date November 30, 2005</p> <hr/> <p>5. Docket No. 030-03759 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Any byproduct material with Atomic Numbers 1 through 83 and half lives less than or equal to 120 days</p> <p>B. Any byproduct material with Atomic Numbers 1 through 83 and half lives greater than 120 days</p> <p>C. Nickel 63</p>	<p>7. Chemical and/or physical form</p> <p>A. Any</p> <p>B. Any</p> <p>C. Foil or plated sources registered either with the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or with an Agreement State.</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. Not to exceed 1 millicurie per radionuclide and 20 millicuries total</p> <p>B. See Condition 12</p> <p>C. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State</p>
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9. Authorized use:

A. and B. Research and development as defined in 10 CFR Part 30.4.

C. To be used for sample analysis in compatible gas chromatography devices that have been registered either with the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or with an

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Agreement State and have been distributed in accordance with a Commission or Agreement State specific license authorizing distribution to persons specifically authorized by a Commission or Agreement State license to receive, possess, and use the devices.

CONDITIONS

10. Licensed material may be used or stored only at the licensee's facilities located at 74 Amity Road, Bethany, Connecticut; and Benson Road, Middlebury, Connecticut.
11. A. Licensed material shall be used by or under the supervision of individuals designated, in writing, by the Radiation Safety Officer. The licensee shall maintain records of individuals designated as users for 3 years following the last use of licensed material by the individual.
- B. The Radiation Safety Officer is Michael H. Gay.
12. A. If only one radionuclide is possessed, the possession limit is the quantity specified for that radionuclide in 10 CFR 33.100, Schedule A, Column II. If two or more radionuclides are possessed, the possession limit is determined as follows: For each radionuclide, determine the ratio of the quantity possessed to the applicable quantity specified in 10 CFR 33.100, Schedule A, Column II, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.
- B. Notwithstanding 10 CFR 33.100, Schedule A, Column II, the applicable quantities, for the purpose of performing the unity calculation as provided in Section A of this condition, for the following radionuclides are:
- | | |
|------------|--------------|
| Iodine 129 | 1 millicurie |
| Hydrogen 3 | 10 curies |
13. The licensee shall not use licensed material in or on human beings except as provided otherwise by specific condition of this license.
14. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.
15. 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.

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- 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 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.**
- 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.**
- F. 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.**
- G. 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.**
- H. Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.**
- 16. 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**

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date of each inventory and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.

- 17. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
- 18. Maintenance, repair, cleaning, replacement, and disposal of foils contained in detector cells shall be performed only by the device manufacturer or other persons specifically authorized by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
- 19. A. Detector cells containing a titanium tritide foil or a scandium tritide foil shall only be used in conjunction with a properly operating temperature control mechanism which prevents the foil temperatures from exceeding that specified in the certificate of registration referred to in 10 CFR 32.210.

B. When in use, detector cells containing a titanium tritide foil or a scandium tritide foil shall be vented to the outside.
- 20. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
- 21. 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 16, 1994
B. Letter dated November 1, 1995

For the U.S. Nuclear Regulatory Commission

Original signed by Elizabeth Ullrich

Date January 27, 2005
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By _____
Elizabeth Ullrich
Commercial and R&D Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406