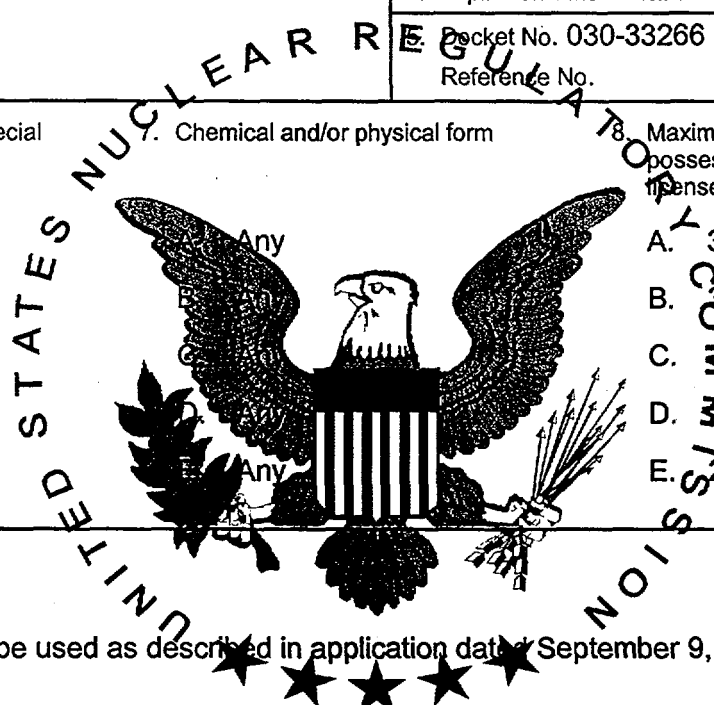


**MATERIALS LICENSE**

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. Aastrom Biosciences 2. P.O. Box 376</p> <p>Ann Arbor, MI 48106</p>	<p>In accordance with letter dated <b>October 14, 2004,</b></p> <p>3. License number 21-26519-01 is amended in its entirety to read as follows:</p> <p>4. Expiration date <b>March 31, 2014</b></p> <p>5. Pocket No. 030-33266 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Phosphorus-32 B. Phosphorus-33 C. Sulfur-35 D. Chromium-51 E. Hydrogen-3</p>	<p>7. Chemical and/or physical form</p> <p>Any</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 30 millicuries B. 30 millicuries C. 10 millicuries D. 10 millicuries E. 20 millicuries</p>
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9. Authorized Use:

A. through E. To be used as described in application dated September 9, 2003..

CONDITIONS

- 10. Licensed material shall be used only at the licensee's facilities located at 24 Frank Lloyd Wright Drive, Domino's Farms, Lobby L, Ann Arbor, Michigan.
- 11. The Radiation Safety Officer: Douglas M. Smith, Ph.D.

**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**

License Number  
21-26519-01

Docket or Reference Number  
030-33266

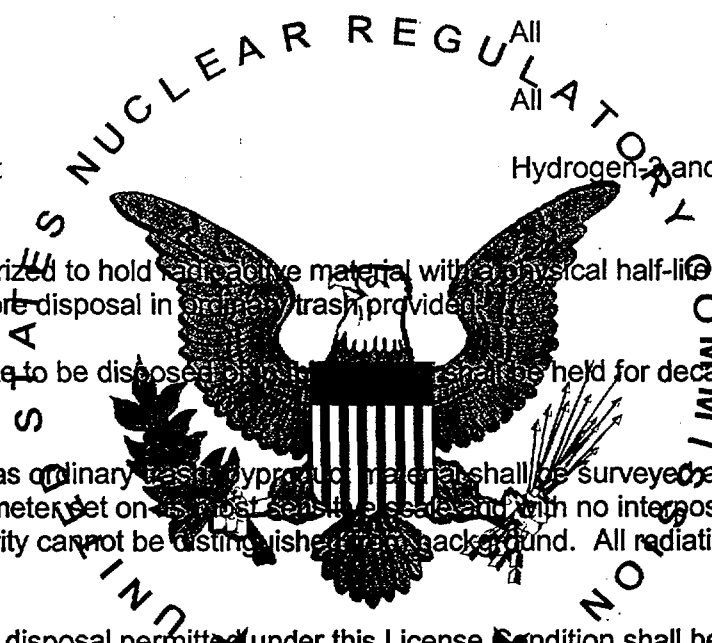
Amendment No.11

12. Licensed material listed in Item 6 above is authorized for use by the following individual(s) for the materials and uses indicated:

- A. Douglas M. Smith All
- B. Gayle C. Gorgas All
- C. Kristin L. Goltry All
- D. Gregory Poynter All
- E. Rachel Calayag All
- F. Michael LaForest Hydrogen-2 and chromium-51

13. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash, provided:

- A. Radioactive waste to be disposed of in trash shall be held for decay a minimum of 10 half-lives.
- B. Before disposal as ordinary trash, byproduct material shall be surveyed at the container surface with the appropriate meter set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
- C. A record of each disposal permitted under this License Condition shall be retained for 3 years. The record must include the date of disposal, the date which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.



**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License Number  
21-26519-01Docket or Reference Number  
030-33266

Amendment No.11

14. 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 9, 2003; and
- B. Attachment D, "Radiation Safety Manual", to revised application dated July 26, 1993, submitted under letter dated September 7, 1993; and
- C. Letter dated October 14, 2004.



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date NOV 26 2004

By

Toye L. Simmons  
Materials Licensing Branch  
Region III