Lth 28279

030-30813

August 31, 1988

U.S. Nuclear Regulatory Commission
Region 1
Attn: John E. Glenn, Ph.D.
Nuclear Materials Safety Branch
475 Allendale Road
King of Prussia, PA 19406

Dear Dr. Glenn:

With this letter and the enclosed Forms 483, I am applying for a General License to use Byproduct Material in the form of in vitro diagnostic test kits at Boston Biomedica, Incorporated.

Boston Biomedica, Incorporated, is currently located at the letterhead address. By October 1, 1988, the company will move to 375 West Street, West Bridgewater, MA 02379. The General License is requested to cover work to be performed at that address.

I have enclosed some promotional material which indirectly describes the use of in vitro diagnostic testing at Boston Biomedica. We are already performing in vitro diagnostic tests using non-isotopic methods (enzyme immunoassays, Western Blots). With our growth and the move to a larger facility, I would like to expand our capability to include radioimmunoassay.

I will be the Radiation Safety Officer at Boston Biomedica. Prior to taking this position in June 1988, I was the Director of the Radioimmunoassay Laboratory and the Radiation Safety Officer for the Department of Laboratory Medicine at the Lahey Clinic in Burlington, Massachusetts, for the preceding seven years. I recently completed the Occupational and Environmental Radiation Protection Course at the Harvard University School of Public Health. If our work in this area grows, I will apply for a Material License using NRC Form 313.

Thank you for considering this application. Please call me if you need any further information. The phone number at the new facility will be 508-580-1900, effective October 1, 1988. Until then I can be reached at the number shown below.

Sincerely,

Patricia E. Garrett, Ph.D.

Patricia E. Garrett, Ph.D.
Director, Regulatory Affairs and
Special Projects

No. del
1-9539

BBI
BOSTON BIOMEDICA, INC.
51 FRANCIS AVENUE • MANSFIELD, MA 02048
Tel (617) 339-1900 Telex 5106012210

NRC Form 483
(12-81)
10 CFR 31

U.S. NUCLEAR REGULATORY COMMISSION

REGISTRATION CERTIFICATE—IN VITRO TESTING WITH BYPRODUCT MATERIAL UNDER GENERAL LICENSE

Approved by OMB
3150-0035
1-31-84

Section 31.11 of 10 CFR 31 establishes a general license authorizing physicians, clinical laboratories, hospitals, and veterinarians in the practice of veterinary medicine to possess certain small quantities of byproduct material for *in vitro* clinical or laboratory tests not involving the internal or external administration of the byproduct material or the radiation therefrom to human beings or animals. Possession of byproduct material under 10 CFR 31.11 is not authorized until the physician, clinical laboratory, hospital, or veterinarian in the practice of veterinary medicine, has filed NRC Form 483 and received from the Commission a validated copy of NRC Form 483 with registration number.

Boston Biomedica, Inc.
375 West Street
West Bridgewater, MA 02379

3. I hereby apply for a registration number pursuant to §31.11, 10 CRF 31 for use of byproduct material for *(please check one block only)*
   - ☐ a. Myself, a duly licensed physician authorized to dispense drugs in the practice of medicine.
   - ☐ b. The above-named clinical laboratory.
   - ☐ c. The above-named hospital.
   - ☐ d. Veterinarian in the practice of veterinary medicine.
4. To be completed by the Nuclear Regulatory Commission.

INSTRUCTIONS

1. Submit this form in triplicate to:
   Office of Nuclear Material Safety and Safeguards
   ATTN: Material Licensing Branch
   U.S. Nuclear Regulatory Commission
   Washington, D.C. 20555

2. Please print or type the name and address (including zip code) of the registrant physician, clinical laboratory, hospital, or veterinarian in the practice of veterinary medicine for whom or for which this registration form is filed. Position the first letter of the address below the left dot and do not extend the address beyond the right dot. (At NRC, a registration number will be assigned and a validated copy of NRC Form 483 will be returned.)

Registration number:

(If this is an initial registration, leave this space blank — number to be assigned by NRC. If this is a change of information from a previously registered general license, include your registration number.)

5. If place of use is different from address in Item 1, please give complete address:

not applicable

6. Certification:

I hereby certify that:

a. All information in this registration certificate is true and complete.

b. The registrant has appropriate radiation measuring instruments to carry out the tests for which byproduct material will be used under the general license of 10 CRF 31.11. The tests will be performed only by personnel competent in the use of the instruments and in the handling of the byproduct materials.

c. I understand that Commission regulations require that any change in the information furnished by a registrant on this registration certificate be reported to the Director of Nuclear Material Safety and Safeguards within 30 days from the effective date of such change.

d. I have read and understand the provisions of Section 31.11 of NRC regulations 10 CFR 31 (reprinted on the reverse side of this form); and I understand that the registrant is required to comply with those provisions as to all byproduct material which he receives, acquires, possesses, uses, or transfers under the general license for which this Registration Certificate is filed with the Nuclear Regulatory Commission.

Date August 31, 1988

By Patricia E Garrett, Ph.D.

Patricia E. Garrett, Ph.D., Director, Regulatory Affairs & Special Project

Printed name and title or position of person filing form

WARNING— 18 U.S.C., Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

CONDITIONS AND LIMITATIONS OF GENERAL LICENSE 10 CFR 31.11

§31.11 General license for use of byproduct materials for certain in vitro clinical or laboratory testing.

(a) A general license is hereby issued to any physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital to receive, acquire, possess, transfer, or use, for any of the following stated tests, in accordance with the provisions of paragraphs (b), (c), (d), (e), and (f) of this section, the following byproduct materials in prepackaged units:

(1) Iodine-125, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(2) Iodine-131, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(3) Carbon-14, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material or the radiation therefrom, to human beings or animals.

(4) Hydrogen 3 (tritium), in units not exceeding 50 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(5) Iron 59, in units not exceeding 20 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(6) Selenium-75, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(7) Mock Iodine-125 reference or calibration sources, in units not exceeding 0.005 microcurie of iodine-129 and 0.005 microcurie of americium-241 each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(b) No person shall receive, acquire, possess, use or transfer byproduct material pursuant to the general license established by paragraph (a) of this section until he has filed NRC Form 483, "Registration Certificate—In Vitro Testing with Byproduct Material Under General License," with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and received from the Commission a validated copy of NRC Form 483 with registration number assigned or until he has been authorized pursuant to §35.14(c) of this chapter to use byproduct material under the general license in this §31.11. The registrant shall furnish on NRC Form 483 the following information and such other information as may be required by that form:

(1) Name and address of the registrant;

(2) The location of use; and

(3) A statement that the registrant has appropriate radiation measuring instruments to carry out in vitro clinical or laboratory tests with byproduct materials as authorized under the general license in paragraph (a) of this section, and that such tests will be performed only by personnel competent in the use of such instruments and in the handling of the byproduct materials.

(c) A person who receives, acquires, possesses or uses byproduct material pursuant to the general license established by paragraph (a) of this section shall comply with the following:

(1) The general licensee shall not possess at any one time, pursuant to the general license in paragraph (a) of this section, at any one location of storage or use, a total amount of iodine 125, iodine 131, selenium-75, and/or iron 59 in excess of 200 microcuries.

(2) The general licensee shall store the byproduct material, until used, in the original shipping container or in a container providing equivalent radiation protection.

(3) The general licensee shall use the byproduct material only for the uses authorized by paragraph (a) of this section.

(4) The general licensee shall not transfer the byproduct material except by transfer to a person authorized to receive it by a license pursuant to this chapter or from an Agreement State,[1] nor transfer the byproduct material in any manner other than in the unopened, labeled shipping container as received from the supplier.

(5) The general licensee shall dispose of the Mock Iodine-125 reference or calibration sources decribed in paragraph (a)(7) of this section as required by §20.301 of this chapter.

(d) The general licensee shall not receive, acquire, possess, or use byproduct material pursuant to paragraph (a) of this section:

(1) Except as prepackaged units which are labeled in accordance with the provisions of a specific license issued under the provisions of §32.71 of this chapter or in accordance with the provisions of a specific license issued by an Agreement State that authorizes manufacture and distribution of iodine-125, iodine-131, carbon-14, hydrogen-3 (tritium), selenium-75, iron-59 or Mock Iodine-125 for distribution to persons generally licensed by the Agreement State.

(2) Unless the following statement, or a substantially similar statement which contains the information called for in the following statement, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:[2]

This radioactive material may be received, acquired, possessed, and used only by physicians, veterinarians in the practice of veterinary medicine, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of the U.S. Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority.

.....

Name of manufacturer

(e) The registrant possessing or using byproduct materials under the general license of paragraph (a) of this section shall report in writing to the Director of Nuclear Material Safety and Safeguards any changes in the information furnished by him in the "Registration Certificate—In Vitro Testing with Byproduct Material Under General License," NRC Form 483. The report shall be furnished within 30 days after the effective date of such change.[3]

(f) Any person using byproduct material pursuant to the general license of paragraph (a) of this section is exempt from the requirements of Parts 19, 20 and 21 of this chapter with respect to byproduct materials covered by that general license, except that such persons using the Mock Iodine-125 described in paragraph (a)(7) of this section shall comply with the provisions of §20.301, 20.402 and 20.403 of this chapter.

NOTES

[1] A State to which certain regulatory authority over radioactive material has been transferred by formal agreement, pursuant to section 274 of the Atomic Energy Act of 1954, as amended.

[2] Material generally licensed under this section prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

[3] A new triplicate set of this Registration Certificate, NRC Form 483, may be used to report any change of information furnished by a registrant as required by §31.11(e).

If larger quantities or other forms of byproduct material than those specified in the general license of 10 CFR 31.11 are required, an "Application for Byproduct Material License," NRC Forms 313I, 313M, or 313R should be filed to obtain a specific byproduct material license. Copies of application and registration forms may be obtained from the United States Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Material Licensing Branch, Division of Fuel Cycle and Material Safety.

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 522a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 483. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. AUTHORITY Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).

2. PRINCIPAL PURPOSE(S) The information is evaluated by the NRC staff pursuant to criteria set forth in 10 CFR Parts 30-36 to determine whether the application conforms to the requirements of the Atomic Energy Act of 1954, as amended, and the regulations of the NRC, for the issuance of a registration certificate authorizing the use of in vitro testing.

3. ROUTINE USES The information may be used: (a) to provide records to State health departments for their information and use; and (b) to provide information to Federal, State, and local health officials and other persons in the event of incident or exposure for purposes of their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, or local agencies in the event the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION It is voluntary that you furnish the requested information. If the requested information is not furnished, however, the registration certificate, or amendment thereof, will not be processed.

5. SYSTEM MANAGER(S) AND ADDRESS Director, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

NRC Form 483
(12-81)
10 CFR 31

U.S. NUCLEAR REGULATORY COMMISSION

REGISTRATION CERTIFICATE—IN VITRO TESTING WITH BYPRODUCT MATERIAL UNDER GENERAL LICENSE

Approved by OMB
3150-0035
1-31-84

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Boston Biomedica, Inc.
375 West Street
West Bridgewater, MA 02379

3. I hereby apply for a registration number pursuant to §31.11, 10 CRF 31 for use of byproduct materials for *(please check one block only)*
   - ☐ a. Myself, a duly licensed physician authorized to dispense drugs in the practice of medicine.
   - ☐ b. The above-named clinical laboratory.
   - ☐ c. The above-named hospital.
   - ☐ d. Veterinarian in the practice of veterinary medicine.
4. To be completed by the Nuclear Regulatory Commission.

INSTRUCTIONS

1. Submit this form in triplicate to:
   Office of Nuclear Material Safety and Safeguards
   ATTN: Material Licensing Branch
   U.S. Nuclear Regulatory Commission
   Washington, D.C. 20555

2. Please print or type the name and address (including zip code) of the registrant physician, clinical laboratory, hospital, or veterinarian in the practice of veterinary medicine for whom or for which this registration form is filed. Position the first letter of the address below the left dot and do not extend the address beyond the right dot. (At NRC, a registration number will be assigned and a validated copy of NRC Form 483 will be returned.)

Registration number:

(If this is an initial registration, leave this space blank — number to be assigned by NRC. If this is a change of information from a previously registered general license, include your registration number.)

5. If place of use is different from address in Item 1, please give complete address:

not applicable

6. Certification:

I hereby certify that:

a. All information in this registration certificate is true and complete.

b. The registrant has appropriate radiation measuring instruments to carry out the tests for which byproduct material will be used under the general license of 10 CRF 31.11. The tests will be performed only by personnel competent in the use of the instruments and in the handling of the byproduct materials.

c. I understand that Commission regulations require that any change in the information furnished by a registrant on this registration certificate be reported to the Director of Nuclear Material Safety and Safeguards within 30 days from the effective date of such change.

d. I have read and understand the provisions of Section 31.11 of NRC regulations 10 CFR 31 (reprinted on the reverse side of this form); and I understand that the registrant is required to comply with those provisions as to all byproduct material which he receives, acquires, possesses, uses, or transfers under the general license for which this Registration Certificate is filed with the Nuclear Regulatory Commission.

Date August 31, 1988 By Patricia E. Garrett, Ph.D.

Patricia E. Garrett, Ph.D., Director, Regulatory Affairs & Special Projects

Printed name and title or position of person filing form

WARNING— 18 U.S.C., Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

CONDITIONS AND LIMITATIONS OF GENERAL LICENSE 10 CFR 31.11

§31.11 General license for use of byproduct materials for certain in vitro clinical or laboratory testing.

(a) A general license is hereby issued to any physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital to receive, acquire, possess, transfer, or use, for any of the following stated tests, in accordance with the provisions of paragraphs (b), (c), (d), (e), and (f) of this section, the following byproduct materials in prepackaged units:

(1) Iodine-125, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(2) Iodine-131, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(3) Carbon-14, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(4) Hydrogen 3 (tritium), in units not exceeding 50 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(5) Iron 59, in units not exceeding 20 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(6) Selenium-75, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(7) Mock Iodine-125 reference or calibration sources, in units not exceeding 0.005 microcurie of iodine-129 and 0.005 microcurie of americium-241 each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(b) No person shall receive, acquire, possess, use or transfer byproduct material pursuant to the general license established by paragraph (a) of this section until he has filed NRC Form 483, "Registration Certificate—In Vitro Testing with Byproduct Material Under General License," with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and received from the Commission a validated copy of NRC Form 483 with registration number assigned or until he has been authorized pursuant to §35.14(c) of this chapter to use byproduct material under the general license in this §31.11. The registrant shall furnish on NRC Form 483 the following information and such other information as may be required by that form:

(1) Name and address of the registrant;

(2) The location of use; and

(3) A statement that the registrant has appropriate radiation measuring instruments to carry out in vitro clinical or laboratory tests with byproduct materials as authorized under the general license in paragraph (a) of this section, and that such tests will be performed only by personnel competent in the use of such instruments and in the handling of the byproduct materials.

(c) A person who receives, acquires, possesses or uses byproduct material pursuant to the general license established by paragraph (a) of this section shall comply with the following:

(1) The general licensee shall not possess at any one time, pursuant to the general license in paragraph (a) of this section, at any one location of storage or use, a total amount of iodine 125, iodine 131, selenium-75, and/or iron 59 in excess of 200 microcuries.

(2) The general licensee shall store the byproduct material, until used, in the original shipping container or in a container providing equivalent radiation protection.

(3) The general licensee shall use the byproduct material only for the uses authorized by paragraph (a) of this section.

(4) The general licensee shall not transfer the byproduct material except by transfer to a person authorized to receive it by a license pursuant to this chapter or from an Agreement State,[1] nor transfer the byproduct material in any manner other than in the unopened, labeled shipping container as received from the supplier.

(5) The general licensee shall dispose of the Mock Iodine-125 reference or calibration sources decribed in paragraph (a)(7) of this section as required by §20.301 of this chapter.

(d) The general licensee shall not receive, acquire, possess, or use byproduct material pursuant to paragraph (a) of this section:

(1) Except as prepackaged units which are labeled in accordance with the provisions of a specific license issued under the provisions of §32.71 of this chapter or in accordance with the provisions of a specific license issued by an Agreement State that authorizes manufacture and distribution of iodine-125, iodine-131, carbon-14, hydrogen-3 (tritium), selenium-75, iron-59 or Mock Iodine-125 for distribution to persons generally licensed by the Agreement State.

(2) Unless the following statement, or a substantially similar statement which contains the information called for in the following statement, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:[2]

This radioactive material may be received, acquired, possessed, and used only by physicians, veterinarians in the practice of veterinary medicine, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of the U.S. Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority.

.....

Name of manufacturer

(e) The registrant possessing or using byproduct materials under the general license of paragraph (a) of this section shall report in writing to the Director of Nuclear Material Safety and Safeguards any changes in the information furnished by him in the "Registration Certificate—In Vitro Testing with Byproduct Material Under General License," NRC Form 483. The report shall be furnished within 30 days after the effective date of such change.[3]

(f) Any person using byproduct material pursuant to the general license of paragraph (a) of this section is exempt from the requirements of Parts 19, 20 and 21 of this chapter with respect to byproduct materials covered by that general license, except that such persons using the Mock Iodine-125 described in paragraph (a)(7) of this section shall comply with the provisions of §20.301, 20.402 and 20.403 of this chapter.

NOTES

[1] A State to which certain regulatory authority over radioactive material has been transferred by formal agreement, pursuant to section 274 of the Atomic Energy Act of 1954, as amended.

[2] Material generally licensed under this section prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

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2. PRINCIPAL PURPOSE(S) The information is evaluated by the NRC staff pursuant to criteria set forth in 10 CFR Parts 30-36 to determine whether the application conforms to the requirements of the Atomic Energy Act of 1954, as amended, and the regulations of the NRC, for the issuance of a registration certificate authorizing the use of in vitro testing.

3. ROUTINE USES The information may be used: (a) to provide records to State health departments for their information and use; and (b) to provide information to Federal, State, and local health officials and other persons in the event of incident or exposure for purposes of their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, or local agencies in the event the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION It is voluntary that you furnish the requested information. If the requested information is not furnished, however, the registration certificate, or amendment thereof, will not be processed.

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6. Certification:

I hereby certify that:

a. All information in this registration certificate is true and complete.

b. The registrant has appropriate radiation measuring instruments to carry out the tests for which byproduct material will be used under the general license of 10 CRF 31.11. The tests will be performed only by personnel competent in the use of the instruments and in the handling of the byproduct materials.

c. I understand that Commission regulations require that any change in the information furnished by a registrant on this registration certificate be reported to the Director of Nuclear Material Safety and Safeguards within 30 days from the effective date of such change.

d. I have read and understand the provisions of Section 31.11 of NRC regulations 10 CFR 31 (reprinted on the reverse side of this form); and I understand that the registrant is required to comply with those provisions as to all byproduct material which he receives, acquires, possesses, uses, or transfers under the general license for which this Registration Certificate is filed with the Nuclear Regulatory Commission.

Date August 31, 1988

By Patricia E. Garrett, Ph.D.

Patricia E. Garrett, Ph.D., Director, Regulatory Affairs & Special Projects

Printed name and title or position of person filing form

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(2) Iodine-131, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(3) Carbon-14, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(4) Hydrogen 3 (tritium), in units not exceeding 50 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(5) Iron 59, in units not exceeding 20 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(6) Selenium-75, in units not exceeding 10 microcuries each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(7) Mock Iodine-125 reference or calibration sources, in units not exceeding 0.005 microcurie of iodine-129 and 0.005 microcurie of americium-241 each for use in in vitro clinical or laboratory tests not involving internal or external administration of byproduct material, or the radiation therefrom, to human beings or animals.

(b) No person shall receive, acquire, possess, use or transfer byproduct material pursuant to the general license established by paragraph (a) of this section until he has filed NRC Form 483, "Registration Certificate—In Vitro Testing with Byproduct Material Under General License," with the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and received from the Commission a validated copy of NRC Form 483 with registration number assigned or until he has been authorized pursuant to §35.14(c) of this chapter to use byproduct material under the general license in this §31.11. The registrant shall furnish on NRC Form 483 the following information and such other information as may be required by that form:

(1) Name and address of the registrant;

(2) The location of use; and

(3) A statement that the registrant has appropriate radiation measuring instruments to carry out in vitro clinical or laboratory tests with byproduct materials as authorized under the general license in paragraph (a) of this section, and that such tests will be performed only by personnel competent in the use of such instruments and in the handling of the byproduct materials.

(c) A person who receives, acquires, possesses or uses byproduct material pursuant to the general license established by paragraph (a) of this section shall comply with the following:

(1) The general licensee shall not possess at any one time, pursuant to the general license in paragraph (a) of this section, at any one location of storage or use, a total amount of iodine 125, iodine 131, selenium-75, and/or iron 59 in excess of 200 microcuries.

(2) The general licensee shall store the byproduct material, until used, in the original shipping container or in a container providing equivalent radiation protection.

(3) The general licensee shall use the byproduct material only for the uses authorized by paragraph (a) of this section.

(4) The general licensee shall not transfer the byproduct material except by transfer to a person authorized to receive it by a license pursuant to this chapter or from an Agreement State,[1] nor transfer the byproduct material in any manner other than in the unopened, labeled shipping container as received from the supplier.

(5) The general licensee shall dispose of the Mock Iodine-125 reference or calibration sources decribed in paragraph (a)(7) of this section as required by §20.301 of this chapter.

(d) The general licensee shall not receive, acquire, possess, or use byproduct material pursuant to paragraph (a) of this section:

(1) Except as prepackaged units which are labeled in accordance with the provisions of a specific license issued under the provisions of §32.71 of this chapter or in accordance with the provisions of a specific license issued by an Agreement State that authorizes manufacture and distribution of iodine-125, iodine-131, carbon-14, hydrogen-3 (tritium), selenium-75, iron-59 or Mock Iodine-125 for distribution to persons generally licensed by the Agreement State.

(2) Unless the following statement, or a substantially similar statement which contains the information called for in the following statement, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:[2]

This radioactive material may be received, acquired, possessed, and used only by physicians, veterinarians in the practice of veterinary medicine, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of the U.S. Nuclear Regulatory Commission or of a State with which the Commission has entered into an agreement for the exercise of regulatory authority.

.....

Name of manufacturer

(e) The registrant possessing or using byproduct materials under the general license of paragraph (a) of this section shall report in writing to the Director of Nuclear Material Safety and Safeguards any changes in the information furnished by him in the "Registration Certificate—In Vitro Testing with Byproduct Material Under General License," NRC Form 483. The report shall be furnished within 30 days after the effective date of such change.[3]

(f) Any person using byproduct material pursuant to the general license of paragraph (a) of this section is exempt from the requirements of Parts 19, 20 and 21 of this chapter with respect to byproduct materials covered by that general license, except that such persons using the Mock Iodine-125 described in paragraph (a)(7) of this section shall comply with the provisions of §20.301, 20.402 and 20.403 of this chapter.

NOTES

[1] A State to which certain regulatory authority over radioactive material has been transferred by formal agreement, pursuant to section 274 of the Atomic Energy Act of 1954, as amended.

[2] Material generally licensed under this section prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

[3] A new triplicate set of this Registration Certificate, NRC Form 483, may be used to report any change of information furnished by a registrant as required by §31.11(e).

If larger quantities or other forms of byproduct material than those specified in the general license of 10 CFR 31.11 are required, an "Application for Byproduct Material License," NRC Forms 313I, 313M, or 313R should be filed to obtain a specific byproduct material license. Copies of application and registration forms may be obtained from the United States Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Material Licensing Branch, Division of Fuel Cycle and Material Safety.

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 522a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on NRC Form 483. This information is maintained in a system of records designated as NRC-3 and described at 40 Federal Register 45334 (October 1, 1975).

1. AUTHORITY Sections 81 and 161(b) of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2111 and 2201(b)).

2. PRINCIPAL PURPOSE(S) The information is evaluated by the NRC staff pursuant to criteria set forth in 10 CFR Parts 30-36 to determine whether the application conforms to the requirements of the Atomic Energy Act of 1954, as amended, and the regulations of the NRC, for the issuance of a registration certificate authorizing the use of in vitro testing.

3. ROUTINE USES The information may be used: (a) to provide records to State health departments for their information and use; and (b) to provide information to Federal, State, and local health officials and other persons in the event of incident or exposure for purposes of their information, investigation, and protection of the public health and safety. The information may also be disclosed to appropriate Federal, State, or local agencies in the event the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, or local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION It is voluntary that you furnish the requested information. If the requested information is not furnished, however, the registration certificate, or amendment thereof, will not be processed.

5. SYSTEM MANAGER(S) AND ADDRESS Director, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

BOSTON BIOMEDICA, INC.

Located minutes southwest of Boston and a part of Boston's biomedical community, Boston Biomedica, Inc. is a contract manufacturer and developmental laboratory specializing in:

- **manufacture** of a stable, high quality processed serum matrix **(BASEMATRIX)** used in the production of diagnostic test kit standards and controls

- **production** of autoimmune and infectious disease-state panels required for the development, production, licensing and marketing of in-vitro diagnostic test kits

- **production** of sensitivity panels used to develop, validate and quality control anti-HIV (AIDS) test systems

- **custom manufacture** of serum and plasma products to specifications of diagnostic test system manufacturers

- **management** of clinical trials in-house of new and existing in-vitro diagnostic test kits

- **consulting services** in technical and marketing areas to in-vitro diagnostics manufacturers

BBI

BOSTON BIOMEDICA, INC.

51 FRANCIS AVENUE • MANSFIELD, MA 02048

Tel (617) 339-1900 Telex 5106012210

BBI PRODUCT LIST

1. BASEMATRIX

- produced through the defibrination and subsequent processing of HBsAg/anti-HIV negative normal human plasma
- a quality processed base matrix characterized for use in RIA, EIA and FIA test systems
- cold processing and sterile systems application provides exceptional product integrity
- biochemical assays and component profiles indicate that **BASEMATRIX** can be a suitable serum substitute for calibrator base matrix
- biochemical assays and component profiles available upon request
- sterile filtered and bottled

2. BASEMATRIX, Analyte Specific

- produced through further processing of **BASEMATRIX**
- each individual plasma unit tested for the presence/absence of specific analytes and subsequently defibrinated/processed only if client specifications are met
- sterile filtered and bottled

3. BASEMATRIX, Analyte Free

- produced through further processing of **BASEMATRIX**
- activated carbon, exchange resin, and affinity processing available
- most major steroids and thyroid hormones removed
- processed to client specifications
- sterile filtered and bottled

4. Normal Human Serum, Single Donor

- supplied as sterile single pack individual units
- gender, age and other information available
- HBsAg, anti-HIV negative
- additional screening available for hormones, enzymes, viral markers, etc.
- clear, straw colored and non-lipemic
- single pack units provide flexibility in processing applications
- collected from clotted whole blood at FDA registered/licensed facilities
- serum separated from cells within 24 hours

5. Normal Human Serum, Pooled

- collected from volunteer donors at FDA registered/licensed facilities
- clear, straw colored and non-lipemic
- sterile filtered
- all individual serum samples/units contained in each lot of product, as well as the final lot itself, are non-reactive for HBsAg and anti-HIV by FDA licensed tests

6. **anti-HIV Seroconversion Panels**

A series of extremely rare and unique human plasma samples taken from individuals over a period of time during which these individuals converted from negative to positive for the antibody against Human Immunodeficiency Virus.

7. **Disease State Serum and Plasma**

Boston Biomedica, Inc., through its association with federally licensed clinical laboratories and blood banks, has developed programs to source directly disease-state serum and plasma for the diagnostics manufacturer, as well as for research and development interests. These products are supplied in bulk as either processed (using **BBI** proprietary defibrination techniques) or unprocessed material, as well as in well characterized Performance Panels (described below). Current products include materials reactive for:

Viral Hepatitis	ToRCH	Disease States
HBsAg, AD Subtype	Toxoplasmosis, IgG	RF
HBsAg, AY Subtype	Rubella, IgG	CRP
anti-HBs	CMV, IgG	ANA (all patterns)
HBeAg	HSV I, II, IgG	anti-DNA
anti-HBe	EBV, IgG	RPR
anti-HBc, IgM	**Negative** ToRCH Pools	Chlamydia
anti-HBc, Total	and individual units	Infectious Mono (Heterophile)
anti-HAV, IgM	*Inquire on the	Lyme Disease
anti-HAV, Total	availability of	
anti-HB Delta	ToRCH, IgM units	

8. **Performance Panels**

These panels are comprised of a series of related samples provided in a specific format to allow for the determination of certain parameters of test kit performance, i.e., sensitivity, specificity, etc. These panels include:

a. HBsAg sensitivity panel: used to determine the absolute, end-point sensitivity of HBsAg test kits. Developed through serial, two-fold dilutions of two HBsAg positive human serum pools. Each pool is comprised of 12 HBsAg positive individuals; one with individuals exhibiting AD subtype, the other with individuals manifesting the AY reactivity. HBsAg concentrations from 2.5 to 0.039 ng/ml (approximate).

b. anti-HBc sensitivity panel: used to determine the absolute, end-point sensitivity of anti-HBc test kits. Developed through serial, two-fold dilutions of a human serum pool comprised of 12 anti-HBc positive individuals. Calibrated against the Paul Ehrlich Institute (PEI) standard.

c. autoimmune panel*: used to determine the degree of specificity of immunodiagnostic test kits for the factors they are intended to measure by looking for cross-reactivity (interference) with certain auto-antibodies contained in the panel samples. This panel is currently comprised of three series, each containing 10 mls. of plasma from at least 6 different individuals with a specific disease-state factor, i.e., ANA, RF/CRP, or elevated IgE.

d. infectious disease panel*: used to determine the degree of specificity of immunodiagnostic test kits for the factors they are intended to measure by looking for cross-reactivity (interference) with certain antibodies against infectious agents contained in the panel samples. This panel is currently comprised of seven series, each containing 10 mls. of plasma from at least 6 different individuals exhibiting a specific disease-state factor, i.e., antibodies to toxo, rubella, CMV, herpes, EBV and HBsAg, as well as individuals with elevated ALT values.

* The following information is provided with each member in the panel:

- age
- gender
- race
- diagnosis of clinical condition
- medication(s) at time of donation
- test result by consensus market leader
- HBsAg, anti-HIV certification

SERVICES

1. Contract Site for Clinical (Field) Trials

BBI, by virtue of its technical expertise, years of experience in the diagnostics field, and its access to patient and blood donor samples offers an ideal location for clinical (field) trials. During the past fifteen years, our staff has been involved in over 25 studies for nearly a dozen biomedical companies; these data were used for R&D, marketing and regulatory purposes.

2. Consultation

BBI offers technical and marketing guidance to manufacturers of infectious disease diagnostic test kits.

3. **Contract Manufacturing**

BBI manufactures blood-derived products under contract. Processes involved in this manufacture can include:

- identification and isolation of raw materials
- full characterization of materials by analysis for infectious disease and other analytes, including HIV and anti-HIV
- viral inactivation
- coordination of infectivity studies
- defibrination of the base components, using Boston Biomedica's proprietary defibrination procedure
- sterile filtration and filling
- evaluations to assess final product quality and performance
- additional testing per client specifications.

QUALITY ASSURANCE

All manufacturing is performed in compliance with GMP. BBI's dedication to quality requires detailed supervision and monitoring of each step of the production process. The collection and processing of blood products is critical to the integrity of the final product. To guarantee that our high standards are maintained, we train our personnel thoroughly and closely supervise collection and processing procedures.

CONFIDENTIALITY

Processing of components often requires the use of client proprietary procedures. In the case of clinical (field) trials, certain information of a confidential nature must be released to BBI to ensure the proper performance of the study.

Without exception, strict client confidentiality is maintained at all times.

ADDITIONAL PRODUCTS

There are, of course, many other reagents that have not been discussed that are often required by growing biomedical companies in the continuing development of in-vitro diagnostic products. We are always pleased to discuss these materials with our clients and, when appropriate, to make every reasonable effort to locate or manufacture these items for them.

LTS WORKSHEET

DOCKET NO : 03030813 LICENSE NO : _____ STATUS: 3

MAIL CONTROL: 109539 RECEIPT DATE : 880906 ACTION TYPE: 2

FED. GOVT : N INST. CODE : 28279 LICENSE REGION: 1

ISSUE DATE: _____ ORIGINAL DATE: _____ EXPIRATION DATE: _____

NAME : BOSTON BIOMEDICA, INCORPORATED

DEPT/BUREAU: _____

BUILDING : _____

STREET : 375 WEST STREET

CITY : WEST BRIDGEWATER STATE: MA ZIP: 02379

CONTACT PERSON: PATRICIA E. GARRETT,PH.D., DIR PHONE: _____

PRIMARY PGM CODE : _____ SECONDARY PGM CODES: _____

INSPECTION REGION: 1 PRIORITY CODE: _ INSPECTION CATEGORY: ___

RADIATION SAFETY OFFICER: _____

STATES WHERE USE IS AUTHORIZED: _

0 - ALL LISTED STATES
1 - SAME AS STATE IN ADDRESS
2 - ALL STATES
3 - NON-AGREEMENT STATES

AUTHORIZED STATES: _____ (USE ONLY IF ABOVE IS ZERO)

REPORTING IDENTIFICATION SYMBOL: _____

APPROVAL FOR: REDISTRIBUTION: STORAGE ONLY:
TEMPORARY JOB SITES: INCINERATION:
BURIAL:

EXEMPTIONS: (1)_____ (2)_____

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DESCRIPTION : --
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OTHER : - # SOURCES: ---

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NAME	AUTHORIZATION

ADDRESS WHERE MATERIAL IS USED OR POSSESSED

BUILDING:
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