

**HERCULES**

Hercules Incorporated  
Research Center  
Paper Technologies & Ventures  
500 Hercules Road  
Wilmington, DE 19808-1599  
(302) 995-3000

October 11, 2006

U.S. Nuclear Regulatory Commission - Region I  
475 Allendale Road  
King of Prussia, PA 19406-1415

Attn: Mr. Abdul Iodhi

Re: Disposal of Ambertec BFT Promethium-147 Source

Dear Mr. Iodhi,

Per your instructions I am requesting a "possession only license" for a 3 mCi Promethium-147 sealed beta source. We shipped the instrument containing the source from Florida to Delaware in July, 2006, after receiving verbal approval from the state of Delaware that our state license request had been approved, and that we had permission to house the unit in Delaware. The written state license followed. We recently were made aware that a NRC license was also required. We only were required to have a state license in Florida.

We have made a management decision to dispose of the source, and are actively seeking a licensed means of disposal. A check for the application fee of \$1200 is enclosed.

Sincerely,

*Frank J. Suttman*  
Frank J. Suttman  
Research Fellow - Papermaking

Cc: P.J. Riley  
S.R. Prescott  
E.J. Connors  
M.N. Miller

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03037356  
03800

(07-00222-03)

Q-2

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No. 2105 P. 3

Oct. 11, 2006 3:51 PM

<b>NRC FORM 512</b> U.S. NUCLEAR REGULATORY COMMISSION APPROVED BY OMB: NO. 0645-0120 ESTIMATED BURDEN ON RESPONDERS: To comply with this mandatory commission request, 4.4 hours. Successful completion of this application is necessary to determine if the applicant is qualified and that adequate procedures exist to protect the public health and safety. Such assessment regarding burden estimates to the Records and Policy/Policy Services Branch (1-5 PM), U.S. Nuclear Regulatory Commission, Washington, DC 20545-0001, or by Internet e-mail to <a href="mailto:info@nrc.gov">info@nrc.gov</a> , send to the Desk Officer, Office of Information and Regulatory Affairs, NRC (1-5 PM), 3910-0110, Office of Management and Budget, Washington, DC 20503. If a means used to process an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.	
<b>APPLICATION FOR MATERIAL LICENSE</b>	
<b>INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.</b>	
APPLICATION FOR DISTRIBUTION OF EXISTING PRODUCTIVE FILE APPLICATIONS WITH: DIVISION OF INDUSTRIAL AND MINERAL SAFETY OFFICE OF HAZARDOUS MATERIALS SAFETY AND SURVEILLANCE U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20545-0001	IF YOU ARE LOCATED IN: ALABAMA, ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, ILLINOIS, INDIANA, IOWA, KANSAS, KENTUCKY, LOUISIANA, MAINE, MARYLAND, MASSACHUSETTS, MICHIGAN, MINNESOTA, MISSISSIPPI, MISSOURI, MONTANA, NEBRASKA, NEVADA, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, NORTH DAKOTA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, WISCONSIN, WYOMING, OR WEST VIRGINIA, SEND APPLICATIONS TO: MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION REGION III 240 NORTH WYOMING STREET, SUITE 210 LOUISVILLE, KY 40203-4852
ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS: IF YOU ARE LOCATED IN: ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, ILLINOIS, INDIANA, IOWA, KANSAS, KENTUCKY, LOUISIANA, MAINE, MARYLAND, MASSACHUSETTS, MICHIGAN, MINNESOTA, MISSISSIPPI, MISSOURI, MONTANA, NEBRASKA, NEVADA, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, NORTH DAKOTA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, WISCONSIN, WYOMING, OR WEST VIRGINIA, SEND APPLICATIONS TO: LICENSING ASSISTANCE TEAM DIVISION OF INDUSTRIAL AND MINERAL SAFETY U.S. NUCLEAR REGULATORY COMMISSION REGION III 475 ALLEMANE ROAD KING OF PRUSSIA, PA 19381-1115	ALABAMA, ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IOWA, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW HAMPSHIRE, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO: NUCLEAR MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION REGION III 475 ALLEMANE ROAD, SUITE 400 ALLENTOWN, PA 18106-4852
IF PERSONS LOCATED IN ADJACENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WANT TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTION.	
1. THIS IS AN APPLICATION FOR: <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> A. NEW LICENSE</li> <li><input type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER _____</li> <li><input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____</li> </ul>	2. NAME AND ADDRESS OF APPLICANT (Include ZIP Code) Frank J. Sutmoller Hercules Paper Technologies & Ventures 500 Hercules Rd. Wilmington, DE 19808-1599
3. ADDRESS WHERE LICENSED MATERIAL WILL BE UNDER POSSESSION Hercules Research Center Bldg 8136A Rm 363 500 Hercules Rd. Wilmington, DE 19808-1599	4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION Frank J. Sutmoller TELEPHONE NUMBER 302-995-4171
5. (SEAL IT!) (PLEASE PRINT) (DO NOT WRITE) THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.	
6. RADIOACTIVE MATERIAL a. Element and mass number, b. chemical and physical form, and c. radiation amount (See NRC Form 750 for details)	8. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.
7. INDIVIDUAL RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.	9. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.
8. FACILITIES AND EQUIPMENT.	11. RADIATION SAFETY PROGRAM.
11. WASTE MANAGEMENT.	12. LICENSE FEES (See 10 CFR 170 and Section 170.37) (SEE ONLY FOR POSSESSION) (NRC FORM 1000) \$1200.00
13. CERTIFICATION (Required by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE WITH THIS APPLICATION ARE BEING MADE TO THE BEST OF HIS/HER KNOWLEDGE AND BELIEF.	
THE APPLICANT AND ANY OTHER INDIVIDUALS WHOSE IDENTIFICATION INFORMATION IS ON THIS APPLICATION HAVE READ AND UNDERSTAND THE REGULATIONS, PARTS 20, 32, 33, 34, 35, 36, 39, 40, 41, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.	
VIOLATION OF U.S. SECTION 1862 OF TITLE 18, U.S. CODE, MAKES IT A FEDERAL 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.	
CONTACTING OFFICER - TYPE, PRINTED NAME AND TITLE Frank J. Sutmoller, Research Fellow	SIGNATURE Frank J. Sutmoller
DATE 10/11/06	
<b>FOR NRC USE ONLY</b>	
TYPE OF FEE FILE NO. FILE CATEGORY ALLOCATED/UNALLOCATED CHECK NUMBER COMMENTS	DATE

Attachment to application for material license, Hercules, 10/11/06

5. Promethium-147, solid, sealed source, 4 mCi maximum activity, used in paper formation gauge/instrument Ambertec Beta Formation Tester, Model BFT-3.
6. License is for possession only. We are actively seeking licensed disposal route. No use or intended use at this site.
7. Frank Situan, Research Fellow. Master's Degree in Science with graduate level work in Chemistry and Chemical Engineering. 22 years professional research and technical experience in the paper industry. Formal classroom training documented in radiation safety (2000) with six years experience utilizing this isotope in a laboratory instrument in Florida.
8. Not applicable. License is for possession only.
9. The Hercules Research Center site is contained behind a secure fence line with controlled access gates. The sealed source is contained within a piece of test equipment (Amberlec Beta Formation Tester) that requires special security bits for disassembly and removal.
10. The Hercules Research Center site has a formal radiation safety program. Paul J. Riley is the site radiation safety officer.
11. We have requested bids from two licensed contractors to dispose of the sealed source as soon as possible.

This is to acknowledge the receipt of your letter/application dated

10/11/2006, and to inform you that the initial processing which includes an administrative review has been performed.

New License Application (03037356)  
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 139557.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.

(FOR LFMS USE)  
INFORMATION FROM LTS

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

: Program Code: 03800  
: Status Code: 3  
: Fee Category: \_\_\_\_\_  
: Exp. Date: 0  
: Fee Comments: \_\_\_\_\_  
: Decom Fin Assur Req'd: \_  
:.....

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee: HERCULES PAPER TECH. & VENTURES  
Received Date: 20061011  
Docket No: 3037356  
Control No.: 139557  
License No.: 07-00222-03  
Action Type: New License

2. FEE ATTACHED

Amount: /  
Check No.: /

3. COMMENTS

*Per Billy Slawcy 10/19/06 rec'd  
money \$1,000.00 via credit  
Card.*

Signed *Nelvana Juvon*  
Date 10/19/2006

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /\_/)

1. Fee Category and Amount: \_\_\_\_\_

2. Correct Fee Paid. Application may be processed for:

Amendment \_\_\_\_\_  
Renewal \_\_\_\_\_  
License \_\_\_\_\_

3. OTHER \_\_\_\_\_  
\_\_\_\_\_

Signed \_\_\_\_\_  
Date \_\_\_\_\_