MATERIALS LICENSE

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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.

302085

Licensee	
1. University of Wisconsin-Madison Safety Department	In accordance with letter dated August 29, 1996
2. 30 North Murray Street Madison, WI 53715	3. License Number 48-09843-18 is amended in its entirety to read as follows:
	4. Expiration Date March 31, 1994
	5. Docket or Reference No. 030-03465/030-17753 070-00052/070-00134

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. Any byproduct material between Atomic Nos. 3 through 83, inclusive, except as noted below:	A. Any	A. 3 curies of each byproduct material, total possession limit 30 curies, except as noted below: Iodine-129 1 curie Sulfur-35 5 curies
B. Hydrogen-3	B. Any	B. 5000 curies
C. Carbon-14	C. Any	C. 5 curies
D. Phosphorus-32	D. Any	D. 5 curies
E. Cobalt-60	E. Any	E. 5 curies
F. Molybdenum-99/ Technetium-99m	F. Any	F. 10 curies
G. Cesium-137	G. Any	G. 20 curies
H. Americium-241	H. Any	H. 250 millicuries
I. Americium-241	I. Sealed sources	I. 5 curies
J. Curium-244	J. Any	J. 1 millicurie

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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
K. Plutonium-239	K. Sealed Neutron sources	K. No single source to exceed 16 grams; total possession not to exceed 96 grams
L. Uranium-235	L. Fission chambers (LND Model Nos. 20991, 20992 and 3007N)	L. 10 grams total
M. Uranium (depleted in uranium-235)	M. Plated metal	M. 1,000 kilograms
N. Plutonium-239	N. Sealed sources	N. 10 sources not to exceed 5 microcuries each
O. Uranium-235	O. Any	O. 11.5 grams
P. Cesium-137	P. Sealed sources (3M Model Nos 4P6E, 4F6H, 4D6L, 4F6S, U.S. Nuclear Model No. 375, Isotope Products Lab. Model 193, Amersham Corp. capsules X.8 and X.9, Industrial Reactor Labs, Inc. Models 2-4 and 2-10, or J.L. Shepherd and Assoc. Model 6810)	P. 131.3 curies
Q. Any byproduct material identified in 10 CFR 35.100	Q. Any radiopharmaceutical identified in 10 CFR 35.100	Q. As needed

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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
R. Any byproduct material identified in 10 CFR 35.200	R. Any radiopharmaceutical identified in 10 CFR 35.200	R. As needed
S. Any byproduct material identified in 10 CFR 35.300	S. Any radiopharmaceutical identified in 10 CFR 35.300	S. As needed
T. Any byproduct material identified in 10 CFR 35.400	T. Any brachytherapy sources identified in 10 CFR 35.400	T. As needed
U. Any byproduct material identified in 10 CFR 35.500	U. Sealed sources identified in 10 CFR 35.500	U. As needed
V. Any byproduct material identified in 10 CFR 31.11	V. Prepackaged Kits	V. As needed
W. Iridium-192	W. Sealed sources (BYK Mallinckrodt Model CI L BV)	W. 2 sources not to exceed 12 curies each
X. Curium-244	X. Sealed sources (Isotope Product Labs. Model No. XAN-244-MG, XAN-244-AL, X-KIT-2 and XAN-244-NT)	X. No single source to exceed 4 millicuries, 65 millicuries total
Y. Americium-241	Y. Sealed source (Campbell Pacific Nuclear Model No. CPN-131)	Y. No single source to exceed 50 millicuries, 100 millicuries total

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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
Z. Uranium	Z. Uranium metal encapsulated in aluminum cans	Z. 2550 kilograms
AA. Cobalt-60	AA. Sealed Source (Neutron Products NPI 20-1200)	AA. 225 curies
BB. Uranium depleted in uranium-235	BB. Solid metal	BB. 22 kilograms
CC. Uranium-236	CC. Any	CC. 200 milligrams
DD. Any byproduct material listed in 10 CFR 30.71 Schedule B	DD. Any	DD. Not to exceed 10 CFR 30.71 Schedule B quantities.
EE. Polonium-210	EE. Plated foil source	EE. Not to exceed 30 millicuries per foil. Total possession not to exceed 100 millicuries
FF. Technetium-99m	FF. Any	FF. As needed
GG. Iodine-131	GG. Any	GG. As needed

9. Authorized Use:

A. through J. To be used for medical research and research and development as defined in 10 CFR Part 30, Section 30.4 including animal studies and student instruction.

K. To be used for training students, instrument calibration, and in conjunction with a subcritical assembly, or for other laboratory experiments requiring neutrons.

L. To be used as neutron flux monitors in a deuterium/tritium generator.

M. To be used for shielding in linear accelerators and electron microscopes.

N. To be used for instrument standardization and calibration.

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O. and CC. To be used for mass spectroscopy of geologic samples, laboratory analysis of irradiated samples, and/or measurement of neutron flux.

P. To be used in a J.L. Shepherd & Assoc. Model 78-2M irradiator for calibration of instruments and irradiation of materials excluding highly flammable or explosive materials.

Q. Medical use described in 10 CFR 35.100.

R. Medical use described in 10 CFR 35.200.

S. Medical use described in 10 CFR 35.300.

T. Medical use described in 10 CFR 35.400.

U. Medical use described in 10 CFR 35.500 in devices which have been evaluated and approved for licensing purposes by the U.S. Nuclear Regulatory Commission or an Agreement State.

V. In vitro studies.

W. One source to be used in accordance with Condition No. 32 in a Nucletron Corporation Micro Selectron-HDR remote afterloading brachytherapy device for interstitial, intraluminal and intracavitary radiotherapy, and surface radiotherapy applications as described in letter dated May 10, 1993, and for irradiation of materials, dosimeters, and animals. One source in its shipping container to be in possession of the licensee as necessary for replacement of the source in the irradiation device.

X. To be used for calibration of instruments and for possession incident to transfer of the sources to individuals specifically licensed by the NRC or an Agreement State.

Y. To be used in Campbell Pacific Nuclear Model No. 503 Hydroprobe surface moisture/density gauge.

Z. To be used in a subcritical assembly for student instruction.

AA. To be used in a Picker Model C-9000 teletherapy unit for irradiation of animals, cell cultures or materials, excluding flammable or explosive materials and for radiation detection instrument calibration.

BB. Shielding in a Picker Model C-9000 teletherapy unit.

DD. To be used for in vitro studies of lake algae, bacterial metabolism, and trace metal uptake.

EE. To be used in electrospray ionization mass spectrometry for DNA sequencing.

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FF. For veterinary diagnostic studies as described in letters dated October 29 and December 19, 1996.

GG. For veterinary therapy treatments of hyperthyroidism in felines as described in letters dated October 29 and December 19, 1996.

CONDITIONS

10. A. Licensed material shall be used only at the licensee's facilities located at the campus of the University of Wisconsin-Madison, Madison, Wisconsin, 7E of Meriter Hospital, Inc., 202 S. Park St., Madison, Wisconsin, and 6001 Research Park Blvd., Madison, Wisconsin.

B. The licensee is authorized to possess and use up to 10 microcuries of cobalt-60 and 1 millicuries of iron-55 as sealed sources at the Marshall Space Flight Center, Huntsville, Alabama, Kennedy Space Center, Florida, and the Cape Kennedy Air Force Station, except for the Lighthouse area, the South Cape (areas north of the old north boundary which runs between Complex 34 and 37) as described in letters dated June 1, 1972 and June 21, 1972, and application dated August 19, 1974.

C. Iodine-125 and americium-241 may be used at temporary locations anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.

D. The licensee is authorized to possess and use 100 millicuries of hydrogen-3, 50 millicuries of carbon-14, 25 millicuries of phosphorus-32 and 10 millicuries of sulfur-35 at the Laboratory of Thermal Biology, West Yellowstone, Montana in accordance with application dated August 19, 1974.

E. In accordance with letter dated August 19, 1972, and application dated August 19, 1974, the licensee is authorized to possess and use (a) one millicurie each of hydrogen-3, carbon-14, phosphorus-32 and sulfur-35 at Lakes Mendota, Monona, Waubese, and Kagonse in Dane County, Wisconsin, Yellowstone National Park, Wyoming and Lake Geneva, Lake Pine, Lake Wingra, Lake Devils, and Badfish Creek Stream, and (b) 100 millicuries of hydrogen-3, 50 millicuries of carbon-14, 25 millicuries of phosphorus-32 and 10 millicuries of sulfur-35 at the Laboratory of Thermal Biology, West Yellowstone, Montana.

F. Licensed material may also be used at the University of Wisconsin, Physical Science Laboratory, Staughton, Wisconsin and the Wisconsin Geological and Natural History Survey, 3817 Mineral Point Road, Madison, Wisconsin.

G. Patients administered cesium-137 and iridium-192 implants may be hospitalized at the Veterans Administration Hospital, Madison, Wisconsin.

H. Sealed sources in moisture meters and soil density meters may be used at temporary job sites of the licensee anywhere in the State of Wisconsin.

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I. The licensee is authorized to possess and use the following radionuclides at the University of Wisconsin's Trout Lake Biological Station, Vilas County, Wisconsin:

Phosphorus-32	50 millicuries
Carbon-14	25 millicuries
Nickel-63	25 millicuries
Cadmium-109	25 millicuries
Zinc-65	25 millicuries
Phosphorus-33	25 millicuries
Hydrogen-3	75 millicuries
Sulfur-35	25 millicuries
Mercury-203	25 millicuries

J. The licensee is authorized to possess and use a maximum of 1 millicurie of hydrogen-3 at 9569 Walkinson Road, Mazomanie, Wisconsin and 1 millicurie of carbon-14 at the Arlington experimental Station, Madison, Wisconsin in accordance with letters dated April 30, 1985 and April 12, 1996.

K. The licensee is authorized to possess and use a maximum of 240 microcuries of hydrogen-3 at the Potter Preserve, Baraboo Hills, Wisconsin in accordance with statements and procedures contained in letter dated November 11, 1985.

L. The licensee is authorized to possess and use a maximum of 5 millicuries of hydrogen-3 at Leopold Memorial Reserve, Sauk County, Wisconsin in accordance with the statements and procedures contained in letter dated May 2, 1986.

M. The licensee is authorized to possess and use a maximum of 6 millicuries of hydrogen-3 at the property located in 9344 Box Turtle Road, Mazomanie Township, Wisconsin in accordance with statements and procedures contained in letter dated May 2, 1986.

N. The licensee is authorized to possess and use a maximum of 200 microcuries of carbon-14 and 50 microcuries of hydrogen-3 at Charmany Farm, University of Wisconsin-Madison, Madison, Wisconsin in accordance with statements and procedures contained in letter dated May 2, 1986.

O. The licensee is authorized to possess and use a maximum of 6 millicuries of carbon-14 and 20 millicuries of hydrogen-3 at the Aquaculture Research Laboratory, 302 South Main Street, Lake Mills, Wisconsin in accordance with statements and procedures contained in letter dated November 24, 1986 (with attachments).

P. The licensee is authorized to possess a maximum of 5 millicuries of hydrogen-3 at the Sauk County, Leopold Memorial Reserve in accordance with statements and procedures contained in letter dated February 29, 1988 (with attachments).

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Q. The licensee is authorized to possess and use a maximum of 2 millicuries of carbon-14 at the A.E. Anding Estate, the intersection of River and Helena Roads, Iowa County, Wisconsin, in accordance with statements and procedures contained in letter dated January 24, 1990.

R. Licensed material listed in Subitem Z. (subcritical assembly) shall be used at the licensee's facilities located at the Mechanical Engineering Bldg. on the campus of the University of Wisconsin - Madison, Madison, Wisconsin.

S. The licensee is authorized to possess and use the following radionuclides at Marl Lake located in Hartman Creek State Park in Waupaca County and at Sparkling Lake located next to Hwy. 51 in Vilas County in accordance with letter dated April 21, 1993:

Carbon-14	200 microcuries
Hydrogen-3	200 microcuries
Cadmium-109	2 microcuries
Mercury-203	2 microcuries
Zinc-65	2 microcuries

T. The licensee may store waste at the Mills Street Storage facility and at the 2120 Herrick Drive storage facility as described in letter dated November 8, 1993.

U. The licensee may use the snow water content device containing up to 5 millicuries of europium-152/154 at temporary job sites of the licensee anywhere in the State of Wisconsin.

V. Licensed material listed in Subitem D.D. may be used at temporary joy sites of the licensee anywhere in the State of Wisconsin in accordance with letters dated April 21, 1993 and November 8, 1993.

W. The licensee is authorized to possess and use tritium labeled noreprinephrine to conduct excretion studies as described in Section 35.100 of 10 CFR Part 35, at the University of Wisconsin, Green Bay, in accordance with letters dated April 3 and 12, 1996, August 29, 1996, June 3, 1996, January 17, 1997, February 11, 1997 and February 26, 1997.

11. A. Of those radionuclides listed in the schedule of the document "Licensed Possession Limits for Which Licensee Radiological Contingency Plans are Required," which was Enclosure 2 of the Order signed February 11, 1981, the quantities present in any one building shall not exceed the quantities specified in the conditions and schedules of that document.

B. This condition does not supersede any of the specifications shown in Items 6., 7., 8. and 9. of the license.

12. A. Licensed material for non-human use shall be used by, or under the supervision of individuals designated by the University Radiation Safety Committee, Bruce Thomadsen, Chairman.

B. Licensed material for human use shall be used by or under the supervision of individuals designated by the Medical Center Radiation Safety Committee, Michael Wilson, M.D., Chairman.

C. The use of licensed material in or on humans shall be by a physician, dentist, or podiatrist as defined in 10 CFR 35.2.

D. Physicians, dentists, or podiatrists designated to use licensed material in or on humans shall meet the training criteria established in 10 CFR 35, Subpart J and shall be designated by the licensee's Radiation Safety Committee. The licensee shall maintain records of individuals designated as users for three years after the individual's last use of licensed material.

E. The Radiation Safety Officer for this license is Ronald Bresell.

F. The Alternate Radiation Safety Officer for this license is Abdul BenZikri.

13. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.

B. Notwithstanding Paragraph A of this Condition, sealed sources designed to 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 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.

D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.

E. Sealed sources need not be leak tested if:

(i) they contain only hydrogen-3; or

(ii) they contain only a radioactive gas; or

(iii) the half-life of the isotope is 30 days or less; or

(iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or

(v) they are not designed to emit alpha particles, 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 or detector cell 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 of radioactive material on the test sample. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, 801 Warrenville Road, Lisle, IL 60532-4351, ATTN: Chief, Nuclear Materials Safety Branch. The report shall specify the source involved, the test results, and corrective action taken. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.

14. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in Section 20.203(a)(1), of 10 CFR Part 20, the licensee is hereby authorized to label detector cells and cell baths, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.

15. Detector cells containing licensed material shall not be opened or the sources removed from the detector cell by the licensee.

16. Sealed sources containing licensed material shall not be opened.

17. The licensee shall not perform repairs or alterations of the irradiator involving removal of shielding or access to the licensed material. Removal, replacement, and disposal of sealed sources in the irradiator shall be performed by a person specifically licensed by the Commission or an Agreement State to perform such services.

18. The licensee shall limit in-house repair and maintenance by University of Wisconsin personnel, on J. L. Shepherd irradiators, to those individuals who have successfully completed the J. L. Shepherd five day repair\maintenance course. Further, repairs and maintenance shall be limited to those activities and procedures covered by the manuals provided with the training course.

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

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20. The licensee is authorized to hold radioactive material with a physical half-life of less than 120 days for decay-in-storage before disposal in ordinary trash provided:

A. Radioactive waste to be disposed of in this manner 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. Generator columns shall be segregated so that they may be monitored separately to ensure decay to background levels prior to disposal.

D. 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 on 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.

21. Pursuant to Sections 20.106(b) and 20.302 of 10 CFR Part 20, the licensee is authorized to dispose of byproduct material by incineration provided the gaseous effluent from incineration does not exceed the limits specified for air in Appendix B, Table II, 10 CFR Part 20. Ash residues may be disposed of as ordinary waste provided appropriate surveys pursuant to Section 20.201 of 10 CFR Part 20 are made to determine that concentrations of licensed material appearing in the ash residues do not exceed the concentrations (in terms of microcuries per gram) specified for water in Appendix B, Table II, 10 CFR Part 20.

22. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.

23. Licensed material shall not be used in or on human beings or in field applications where activity is released except as provided otherwise by specific condition of this license.

24. A. Access to the room housing the MicroSelectron-HDR irradiation device shall be controlled by a door at each entrance.

B. The entrance to the irradiation room shall be equipped with an electrical interlock system that will cause the source to return to the shielded position immediately upon opening of the entrance door. The interlock system shall be connected in such a manner that the source cannot be placed in the irradiation position until the entrance door is closed at the source on-off control is reset at the control panel.

C. Electrical interlocks on the entrance door to the irradiator room shall be tested for proper operation at least once a month. Records of test results shall be maintained for inspection by the Commission.

D. In the event of malfunction of the door interlock, the irradiation device shall be locked in the "off" condition and not used, except as may be necessary for repair or replacement of the interlock system, until the interlock system is shown to be functioning properly.

Prior to initiation of a treatment program, and subsequent to each source exchange for the MicroSelectron-HDR, radiation surveys and tests shall be performed in accordance with the following:

25. A. A radiation survey shall be made of:

(1) The source housing, with the source in the shielded position. The maximum radiation levels at 100 centimeters from the surface of the source head shall not exceed 0.25 milliroentgens per hour.

(2) All areas adjacent to the treatment room with the source in the "irradiation" position. The survey shall clearly establish:

(a) That radiation levels in restricted areas are not likely to cause personnel exposure in excess of the limits specified in Section 20.101, Title 10, Part 20, code of Federal Regulations, Chapter 1, "Standard for Protection Against Radiation" (10 CFR 20).

(b) That quantities of radiation in unrestricted areas do not exceed the limits specified in Section 20.105(b) 10 CFR 20.

B. Records of survey results shall be maintained for inspection by the Commission.

26. The following shall be performed only by persons specifically authorized by the Commission or an Agreement State to perform such services:

A. Installation and replacement of sources contained in the MicroSelectron-HDR irradiation device.

B. Any maintenance or repair operations on the irradiator involving work on the source head, the source driving unit, or other mechanism that could expose the source, reduce the shielding around the source, or compromise the safety of the unit and result in increased radiation levels.

27. The licensee shall install in the afterloader room a permanent radiation monitor capable of continuously monitoring source status.

A. A radiation monitor must provide visible notice of an afterloader unit malfunction that results in an exposed or partially exposed source, and must be observable by an individual entering the afterloader room.

B. The radiation monitor must be equipped with a backup power supply separate from the power supply to the afterloader unit. This backup power supply may be a battery system.

C. The radiation monitor must be checked with a dedicated check source for proper operation each day before the afterloader unit is used for treatment of patients.

D. A licensee shall maintain a record of the check required by paragraph C. for three years. The record must include the date of the check, notation that the monitor indicates when its detector is and is not exposed, and the initials of the individual who performed the check.

E. If a radiation monitor is inoperable, the licensee shall require any individual entering the afterloader room to use a survey instrument or audible alarm personal dosimeter to monitor for any malfunction of the source exposure mechanism that may result in an exposed or partially exposed source. The instrument or dosimeter must be checked with a dedicated check source for proper operation at the beginning of each day of use. The licensee shall keep a record as described in paragraph D. of this section.

F. A licensee shall promptly repair or replace the radiation monitor if it is inoperable.

28. The licensee shall maintain records of information related to decommissioning at the location listed in Item 2. of the license per the provisions of 10 CFR 30.35(g) until this license is terminated by the Commission.

29. A. Access to the teletherapy room shall be controlled by a door at each entrance. Such doors shall be normally closed.

B. Each entrance to the teletherapy room shall be equipped with an electrical interlock system that will turn the teletherapy machine's primary beam of radiation "off" immediately upon opening of any entrance door. The interlock system shall be connected in such a manner that the teletherapy machine's primary beam of radiation cannot be turned "on" until all treatment room entrance doors are closed and the beam "on-off" control is reset at the control panel.

C. Electrical interlocks on entrance doors to the teletherapy room shall be tested for proper operation at least once every 6 months. Records of test results shall be maintained for inspection by the Commission. Records may be disposed of following Commission inspection.

D. In the event of malfunction of any door interlock, the teletherapy machine control shall be locked in the "off" condition and not used, except as may be necessary for repair or replacement of the interlock system, until the interlock system is shown to be functioning properly.

30. The following shall be performed only by persons specifically licensed by the Commission or an Agreement State to perform such services:

A. Installation, relocation, or removal of teletherapy units containing sources.

B. Source exchange.

C. Any maintenance or repair operations on a teletherapy unit involving work on the source drawer, the shutter, or other mechanism that could expose the source, reduce the shielding around the source, or compromise the safety of the unit and result in increased radiation levels.

31. For purposes of Condition 29., access door #1, located at the control room, at the top of the ramp, is not considered an entrance to the teletherapy room and is, therefore, not required to be equipped with an electrical interlock.

32. The licensee is authorized to remove the Picker Model C-9000 teletherapy unit off its track for storage and for purposes of obtaining access to the neutron generator beam line in accordance with the procedures outlined in letters dated August 27, 1992 and November 17, 1992.

33. The licensee may possess 24 curies of iridium-192 (not to exceed 12 curies per source) for use in the Nucletron Corporation MicroSelectron HDR remote afterloading brachytherapy device, provided the individual source activity does not exceed 10 curies at the time of installation, and the source is installed by an authorized individual.

34. 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. Applications dated July 7, 1980, February 20, 1986, January 10, 1989 and November 2, 1979 (excluding frequency and scope of interlock system tests); and

B. Letters dated December 19, 1980, July 25, 1983, August 5, 1983, March 21, 1984, November 19, 1984, July 25, 1985, March 12, 1986, July 17, 1986, May 1, 1987, June 7, 1988 (with enclosures), July 26, 1989, January 24 1990, April 6, 1990 (with attachments), April 16, 1990 (with attachments), June 20, 1990 (with attachments), August 8, 1990, December 27, 1990, November 14, 1991,

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34.B (Continued)

September 21, 1992, March 1, 1993, March 15, 1993 (except Item 8.), March 4, 1980, January 12, 1981, March 9, 1982, February 19, 1985, November 14, 1991, March 15, 1992 (excluding Item 3, regarding off track storage of teletherapy unit), August 27, 1992, September 21, 1992, November 17, 1992, April 21, 1993, May 10, 1993 (except Items 1 and 2), June 16, 1993, June 26, 1993 pertaining to the Picker Model C-9000 teletherapy unit exclusively August 9, 1993 pertaining to the Picker Model C-9000 teletherapy unit exclusively, July 26, 1993, August 12, 1993, November 8, 1993, and January 21, 1994, March 8, 1994, August 8, 1994, November 18, 1994, December 2, 1994, July 21, 1995, October 24, 1995, May 16, 1996 (with enclosures), April 3, 1996, April 12, 1996, June 3, 1996, August 29, 1996, October 29, 1996, December 19, 1996, January 17, 1997, February 11, 1997 and February 26, 1997.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date 3/14/97

By Kevin G. Pace
Nuclear Materials Licensing Branch, Region III

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

(FOR LFMS USE)
INFORMATION FROM LTS

Program Code: 02110
Status Code: 2
Fee Category: 7B EX 2C 2B 1D
Exp. Date: 19940331
Fee Comments: 170.11(A)(4)
Decom Fin Assur Reqd: Y

R2

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
   Applicant/Licensee: WISCONSIN-MADISON, UNIVERSITY OF
   Received Date: 960905
   Docket No: 3003465
   Control No.: 302085
   License No.: 48-09843-18
   Action Type: Amendment

2. FEE ATTACHED
   Amount: ~~*~~ * Add'l Info
   Check No.: ~~*~~ 301227-R6

3. COMMENTS

Signed D. Hersey
Date 12-3-96

B. LICENSE FEE MANAGEMENT BRANCH (Check when "Comments" is entered /__/)

1. Fee Category and Amount: 7B FEE EXEMPT

2. Correct Fee Paid. Application may be processed for:
   Amendment ✓
   Renewal
   License

3. OTHER

Signed SC
Date 12/9/96

1996 DEC -9 PM 2:16

RECEIVED BY LFDCB
Date Dec. 9, 1996
Log Dec 2 III
By SC
Date Completed 12/9/96

UNIVERSITY OF WISCONSIN MADISON

August 29, 1996

U.S. Nuclear Regulatory Commission, Region III
ATTN: Patricia Pelke
Nuclear Materials Licensing Branch
801 Warrenville Road
Lisle, Illinois 60532-4351

RE: Amendment Request, BML **48-09843-18**, Docket No. 030-03465

This letter provides additional information to our 12 April letter requesting the use of radioactive materials at the University of Wisconsin, Green Bay. This letter requested:

> 3. **A researcher at the UW-Madison is collaborating on a 3-year NIH grant with a researcher at the UW-Green Bay. All radioactive materials used in the research will belong to the UW and will be disposed through the UW-Madison. Additionally, all personnel working with radioactive materials will have satisfied license requirements to be radiation workers and all areas of use will be under the auspices of the UW BML 48-09843-18. Enclosed is a letter from UW-Green Bay acknowledging this status. We desire to specifically include these locations in paragraph 10.A., e.g.,**
>
> > ***Licensed material shall be used only at the licensee's facilities located at the campus of the University of Wisconsin-Madison, Madison Wisconsin; 7E of Meriter Hospital, Inc., 202 S. Park St., Madison, Wisconsin; 6001 Research Park Blvd., Madison, Wisconsin; and rooms WH-301, LS-143, LS-311A, and LS-480 at the University of Wisconsin, Green Bay, 2420 Nicolet Drive, Green Bay, Wisconsin.***

We knew that UW-Green Bay has an NRC license, however, because this joint project involves physiological research into the metabolism of (tritiated) norepinephrine, neither UW-Green Bay nor any medical facility has the authorization (NRC broadscope medical license with FDA committee), the project is to be covered by UW-Madison. Items to consider in this regard:

1. The UW-Madison conducts physiological research under the auspices of a joint VA-UW Radioactive Drug Research Committee (RDRC) which has been approved by the FDA (21 CFR 361.1 (c)) to review and approve/disapprove use of radioactive drugs for research.

2. The UW-Madison has a history of conducting (NRC approved) research at non-UW activities, some of which have NRC licenses. Some of the non-UW sites at which we are currently authorized to use radioactive materials under our broadscope license are:

   a. 7E of Meriter Hospital, Inc., Madison (para 10A). Meriter's BML is 48-00395-02.
   b. VA Hospital, Madison (para 10G). VA's BML is 48-01183-01.

FEE EXEMPT 170.11(a)(4)

RECEIVED
SEP 05 1996
REGION III

Safety Department
University of Wisconsin–Madison 30 North Murray Street Madison, Wisconsin 53715-2609
608/262-8769 FAX: 608/262-6767

SEP 05 1996
302085

c. Potter Preserve, Baraboo Hills (para 10K).
d. A.E. Anding Estate (para 10Q).
e. Marl and Sparkling Lakes (para 10S).

Based upon our experience obtaining approval to use radioactive materials at non-UW facilities, the usual requirements have been:

a. The UW has permission of the owner of the facility.
b. The location is authorized by the (UW) license.
c. Authorized users are faculty/staff of the UW-Madison.
d. Workers have satisfied the training requirements of the UW license.
e. Radiation Safety Program is UP the UW Radiation Safety Regulations.

3. The UW-Madison attempts to provide radiation safety support to other UW-System and State of Wisconsin activities. Extending this support to other radiation safety activities within the UW-System is consistent with ALARA. For example:

   a. Radiation Safety has calibrated radiation survey instrumentation for UW-Whitewater, UW-Stevens Point, and the State's Radiation Protection Section.
   b. The Radiation Safety Office has been requested to provide radiation safety consultation and support for UW-Stevens Point (BML 48-09993-01).
   c. The UW-Madison's radioactive waste contract with licensed contractors and the UW-Madison's dosimetry contract are used by other US-system activities.

4. Research of the metabolism of tritiated norepinephrine is a project approved by the RDRC in 1993. The scope of the project has been expanded to include the "effect of cold exposure, exercise, and fasting on norepinephrine kinetics" (attached letter dated June 3, 1996).

For all of these reasons, we desire to include the specific use of radioactive materials at the UW-Green Bay per our original request.

If you have any questions pertaining to this information, please call me at (608) 262-9178 or FAX me at (608) 262-6767.

Sincerely,

Ronald R. Bresell
Radiation Safety Officer

attachment
3 June, 96 letter

Charles K. Stone, M.D.
Associate Professor of Medicine and Radiology

UNIVERSITY OF
WISCONSIN–MADISON
MEDICAL SCHOOL

June 3, 1996

Archie A. McKinney, Jr., M.D.
Chairman, Radioactive Drug Research Committee
William S. Middleton Veterans Administration Hospital
2500 Overlook Terrace
Madison, WI 53705

Dear Dr. McKinney:

We wish to amend our proposal "Post-exercise norepinephrine kinetics with two day norepinephrine" to include the use at the University of Wisconsin-Green Bay by Dr. James Marker.

We wish to amend our protocol to contain the following changes:

1. There will be no change in the receipt and aliquoting of samples in the radiation pharmacy at the University of Wisconsin Madison campus by Richard Hammes or his designate. Quality control will be performed on those samples as previously described. The samples will be frozen and shipped as needed to Green Bay using Federal Express and proper labeling for radioactive substances.

2. The rooms for utilization at the University of Wisconsin-Green Bay are WH-301, LS-143, LS-311a, LS-480. The WH rooms are in Wood Hall, the UW Green Bay building containing the lab, procedure room, and environmental chamber for Dr. Marker. LS stands for the laboratory sciences rooms where tracer and catecholamines will be stored as well as HPLC analysis for catecholamine levels.

3. Previously defined quench standards and use of the beta scintillation counter will be performed at UW-Green Bay as disclosed in the protocol.

4. Wipe testing will be performed by Dr. Marker with results sent to Dr. Stone and to Ronald Bresell, the Radiation Safety Officer.

5. The dosage for the protocol and the administration is unchanged from that

Department of Medicine

CARDIOLOGY SECTION

H6/349 Clinical Science Center 600 Highland Avenue Madison, WI 53792-3248 608/263-1531 FAX 608/263-0405

previously described for the norepinephrine post-exercise protocol. The protocol in Green Bay will test the effect of cold exposure, exercise, and fasting on norepinephrine kinetics. Two groups of individuals are planned to be studied. The first group will undergo a paired study of baseline vs. cold exposure infusion on the first day and the second day fast vs. fasting with cold exposure infusion. Each infusion will have 21 μC of treated norepinephrine. Therefore, the amount administered for group A will be 84 μC. Group B will undergo a baseline and then a post-exercise infusion on the first day. The second study will be fasting versus fasting with exercise infusion. The same dosage will be administered. Individuals will be recruited for group A and group B. Individuals will be allowed to participate in both groups if they desire. If they participate in both groups, the total administrated dose would be 168 μC.

6. Radioactive waste will be disposed per NRC license.

Enclosed are the consent forms for the protocol. Please do not hesitate in contacting me with questions.

Sincerely,

Charles K. Stone, M.D.
Associate Professor of Medicine and Radiology

CKS/slv

Enclosures

MAR 14 1997

Ronald Bresell
Radiation Safety Officer
University of Wisconsin-Madison
Safety Department
30 North Murray Street
Madison, WI 53715

Dear Mr. Bresell:

Enclosed is the NRC license or license amendment which you requested.

You are encourage to carefully review your license or amendment upon receipt as special conditions may have been added to ensure that the changes requested meet NRC requirements.

Please note that authorization to use material at University of Wisconsin, Green Bay is granted in License Condition No. 10.W. As we discussed during a telephone conversation on February 26, 1997, the authorization is limited to tritium labeled norepinephrine excretion studies described in Section 35.100 of 10 CFR Part 35.

Any future correspondence relating to your license should specifically reference your license number to expedite your inquiry.

Should you have any questions regarding your new license or amendment or require clarification, please contact the Materials Licensing Branch at (630) 829-9887.

Sincerely,

Original Signed By
Kevin G. Null
Nuclear Materials Licensing Branch

License No. 48-09843-18
Docket No. 030-03465

Enclosure: As stated

DOCUMENT NAME: M:\03003465.CL7
To receive a copy of this document, indicate in the box: "**C**" = Copy without attachment/enclosure "**E**" = Copy with attachment/enclosure "**N**" = No copy

OFFICE	DNMS/RIII											
NAME	KGNull:brt	KGN										
DATE	03/12/97											

OFFICIAL RECORD COPY

302085

UNIVERSITY OF
WISCONSIN
MADISON

February 26, 1997

U.S. Nuclear Regulatory Commission, Region III
ATTN: Kevin Null
Nuclear Materials Licensing Branch
801 Warrenville Road
Lisle, Illinois 60532-4351

RE: Additional Information -- Univ WI, Green Bay Amendment - BML **48-09843-18**

Dear Kevin:

Per our phone conversation of 26 February, the following additional information is provided.

1. Ordering / Receipt. The procurement of the tritiated norepinephrine (^{3}H-NE) will be per the University Radiation Safety Regulations, Section III (Sources of Radionuclides) and Section VIII (Activities Excepted from URSR). Section VIII allows the Nuclear Pharmacy at the Nuclear Medicine Clinic to order unsealed radiopharmaceuticals. Thus, the ^{3}H-NE may be ordered either by Dr. Marker / Dr. Stone contacting the UW Safety Department's CORD Office (Section III) or the Nuclear Pharmacy (Section VIII) to place the order. The ^{3}H-NE will be purchased from NEN/DuPont as 1 mCi. Regardless of where the material is delivered (i.e., Safety or Nuclear Medicine), receipt will be according to 10 CFR 20.1906 and appropriate records will be maintained.

2. Radiopharmaceutical Preparation. The Nuclear Pharmacy of the Nuclear Medicine Clinic will process the initial order producing 14 unit dose aliquots of 0.07 mCi. Two of the 14 aliquots will be used for sterility and pyrogen testing.

3. Reshipment. The UW will ship the (12) unit dose aliquots to UW-Green Bay under dry ice via Federal Express. The package(s) will contain exempt quantities (1000 μCi -- 10 CFR 30.71, Schedule B).

4. Human Use. Indications are that Rm WH-301 will be used only for performing the experiments. Our recommendation will be that Dr. Marker perform a wipe survey at the conclusion of an injection to insure the injection room need not continue to be posted.

5. Radiation Safety Issues. This study will be conducted under the provisions of the UW-Madison Radiation Safety Regulations. Rooms/containers which have radioactive material will be posted (10 CFR 20, Subpart J) and security/surveillance (10 CFR 20, Subpart I) will be followed. Except for counting of samples in Rm LS-1[illegible] will be "shared" by UW-Green Bay researchers. Dr. Marker will conspicuously mark his LSC sample containers to insure they will not be mixed with Green Bay samples. Waste will be handled and stored per Section XIX, University Radiation Safety

Safety Department

University of Wisconsin–Madison 30 North Murray Street Madison, Wisconsin 53715-2609
608/262-8769 FAX: 608/262-6767

Regulations.

I think I have hit most of the issues. If you need more information, please call me at (608) 262-9178 or FAX me at (608) 262-6767.

Sincerely,

Ronald R. Bresell
Radiation Safety Officer

CONVERSATION RECORD

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

TIME (time) | DATE 2/26/97

○ VISIT ○ CONFERENCE X TELEPHONE

○ INCOMING
X OUTGOING

NAME OF PERSON(S) CONTACTED OR IN CONTACT | ORGANIZATION (OFFICE, DEPT.ETC.) | TELEPHONE NO.
Ron Bresell, RSO

SUBJECT
C/N 02085

SUMMARY
Ron's 2/11/97 letter did not provide enough detail on the physical and administrative control of material to be used at the Green Bay campus. I asked him to provide a description of ordering, receipt and surveying of packages, etc. Who is responsible for these activities?

Also confirmed that he only wants authorization for H-3, not c11 at 35.100

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION | SIGNATURE | DATE
Kevin Null | Kevin D. Null | 2/26/97

ACTION TAKEN

SIGNATURE | TITLE | DATE

UNIVERSITY OF
WISCONSIN
MADISON

February 11, 1997

U.S. Nuclear Regulatory Commission, Region III
ATTN: Kevin Null
Nuclear Materials Licensing Branch
801 Warrenville Road
Lisle, Illinois 60532-4351

RE: Additional Information – Univ WI, Green Bay Amendment - BML **48-09843-18**

Dear Kevin:

This letter provides the information on the University of Wisconsin, Madison's (UW-M) ^{3}H-Norepinephrine metabolic study at the University of Wisconsin, Green Bay (UW-GB) that you requested during our December phone conversation. While our discussion occurred about 15 December, the University began winter break so collecting the information was hindered for a month. The four items are:

1. **Physical and administrative controls**. As noted in our 12 April and 29 August, 1996 letters, the UW-GB has earmarked four rooms for use under this project. The rooms will be used as follows:

   LS-311A storage of tracer
   WH-301 doing the experiments
   LS-480 doing catecholamine assays and preparing samples for scintillation counting
   LS-143 counting cpm in samples

   Control should not be a problem. The only room of the four that has tracer use is LS-143 where the scintillation counter is housed. That room will only be used to count the tracer in the samples. After counting, we will store the vials (pending disposal by UW-M personnel) with our other radioactive waste in one of the other rooms, probably LS-311A. In addition, there are only 3 people authorized to use tracers on the UW-GB campus. To my knowledge they are doing little, if any, work with tracers at the moment, so clear labeling of any of UW-M vials/samples with Dr. Marker's name will make them easy to identify.

2. **Radionuclide use**. Our original request was to authorize radionuclide use UP 35.100, *Use of Byproduct Material for Uptake, Dilution, and Excretion Studies* in these four rooms. We believe the requirement of 35.120 is not applicable because this study involves only ^{3}H, however wipe testing and analysis using liquid scintillation counting will be used to monitor for ^{3}H contamination. The preparation and use of the pharmaceutical [i.e., 35.100 (a) and (b)] will be per Dr. Stone's 17 January, 1997 letter to Dr. Brown, Chairman, Radioactive Drug Research Committee (RDRC). Only radionuclide work associated with 35.100 will be conducted by UW-M at UW-GB.

Safety Department

University of Wisconsin–Madison 30 North Murray Madison, Wisconsin 53715-2609
608/262-8769 FAX: 608/262-6767

3. **Program audits**. This radionuclide use will be in accordance with the UW-M University Radiation Safety Regulations (URSR). As such, persons involved with this study will be radiation workers as defined by Section V, URSR, survey requirements and removable contamination limits are detailed in Section IX, URSR, and radioactive waste will be maintained and collected per Section XIX, URSR. The UW-M Radiation Safety staff will conduct audits per Section XX, URSR.

   It is our intention to conduct an initial briefing with Dr. Marker and his staff after this request is approved by the NRC and before authorization is given to commence research. Thereafter, depending upon the speed and magnitude of the research, the Safety staff will periodically audit the program to insure adherence with our license conditions.

4. **Tie-in letters**. The use of radioactive material by UW-M faculty and staff at UW-GB will be very specific and will adhere to the statements and stipulations we have made in our (UW-M) 12 April and 29 August letters with enclosures dated 3 April (from UW-GB to the UW-M Radiation Safety office) and 3 June, 96 and 17 January, 97 (from Dr. Stone to the RDRC).

If you have any questions pertaining to this information, please call me at (608) 262-9178 or FAX me at (608) 262-6767.

Sincerely,

Ronald R. Bresell
Radiation Safety Officer

attachment
17 January, 1997 letter

cc
RSO, UW-Green Bay

Charles K. Stone, M.D.
Associate Professor of Medicine and Radiology

UNIVERSITY OF
WISCONSIN-MADISON
MEDICAL SCHOOL

January 17, 1997

W. Douglas Brown, M.D.
Chairman, Radioactive Drug Research Committee
VA Hospital

Dear Dr. Brown:

Enclosed are the clarifications on our protocol "Post-exercise norepinephrine kinetics with two day norepinephrine." We have written up a flow sheet of the preparation, dispense, the administration of treated norepinephrine for the kinetic studies. This flow sheet answers the questions posed by the committee.
Specifically:

1. Richard Hammes will be making up the aliquots to be frozen. Dr. Marker will be diluting the aliquots for use.

2. Aliquots will be frozen for single use.

3. The aliquots will be frozen and transported on dry ice by Federal Express.

4. The dose will be administered by Dr. Marker under supervision by Dr. Stone.

5. Wipe testing will be performed with results recorded.

Please contact me with any questions.

Sincerely yours,

Charles K. Stone, M.D.
Associate Professor of Medicine and Radiology

CKS:tds

Department of Medicine

CARDIOLOGY SECTION

H6/349 Clinical Science Center 600 Highland Avenue Madison, WI 53792-3248 608/263-1531 FAX 608/263-0405

Norepinephrine Flow Diagram

1. Receipt of tritiated norepinephrine from DuPont New England Nuclear

^{3}H-NE will be obtained in the active *l* isomer form, in a acetic acid/ethanol solution (90% 0.2 N acetic acid and 10% ethanol). Purity is confirmed by DuPont prior to shipment by high pressure liquid chromatography. ^{3}H-NE will obtained from NEN as 1 mCi in 1 ml acetic acid/ethanol solution, pH4-5, specific activity 40-60 Ci/mmol.

2. Handling by Dick Hammes in Radiopharmacy to include:
   A. 14 aliquots of 0.07 mCi will be made. The stock solution will be diluted to 14 cc using a acetic acid/ethanol solution (90% 0.2 N acetic acid, 10% ethanol solution).

   B. 1 cc will be placed in sterile capped vials (Pharmacy Central Supply, 2 ml vials, #3943). The solution will be passed through a 0.22 micron Millipore filter during aliquotting. Nitrogen gas will be blown through the vial prior to capping.

   C. The aliquots will be stored in a freezer in the dark at -20°C.

   D. Two 1 cc aliquot will be used for sterility and pyrogen testing.

   E. Assay of the aliquot in a Beta scintillation counter at the University of Wisconsin (Department of Surgery, permission obtained from Dr. Southard) and by HPLC in the Clinical Laboratories.

3. Aliquots shipped to James Marker under dry ice via Federal Express for experiment.

4. For study, aliquots will be thawed, diluted, and dilution aliquot assayed for activity
   A. Aliquot diluted to 10 cc with normal saline containing 1 mg/ml of ascorbic acid (Pharmacy Central Supply, 500 mg/ml, #648, Vendor:Abbott Laboratories, North Chicago IL) to prevent oxidation of the norepinephrine. Appropriate amount will be drawn up for a 0.35 $\mu Ci/m^2/min$ infusion.

   B. The solution will be corrected to achieve pH range of 5-7 with sodium acetate (Pharmacy Central Supply, 2 mEq/ml, 20 ml vial, #3906, Vendor:Abbott Laboratories, North Chicago IL).

   C. Assay of an aliquot in a Beta scintillation counter at the University of Wisconsin Green Bay

   D. Solution passed through a Millipore Steritest system (Millipore inc., Catalog #TTHA LA210 (1-800-millipore)).

E. The syringe will be shielded with aluminum foil to prevent degradation by light.

5. IV will be inserted by Dr. Marker under the direction of the Student Health Service

6. Tritiated norepinephrine will be administered by Dr. Marker under Dr. Stone's direction

7. Samples will be obtained for norepinephrine kinetics

8. Samples will be assayed in a beta scintillation counter for activity.

9. Waste will be collected and transported back to the University of Wisconsin-Madison for disposal.

10. Wipe tests will be performed and counted in a beta scintillation counter

CONVERSATION RECORD

TIME: (time) | DATE: 12/16/96

○ VISIT ○ CONFERENCE X TELEPHONE

○ INCOMING
X OUTGOING

NAME OF PERSON(S) CONTACTED OR IN CONTACT: Ron Bressel

ORGANIZATION (OFFICE, DEPT.ETC.):

TELEPHONE NO.:

SUBJECT: C/N 02085

SUMMARY:

Prior to issuing authorization to use material at U of Wisc. - Green Bay, please submit the following additional information:

1. Describe how the material used at Green Bay under Madison's license will be controlled, i.e. kept physically and administratively separate from Green Bay's material. Describe such things as package ordering, receipt, security, etc.

2. Identify material that will be used at Green Bay. I will license a separate condition under location of use that authorizes the specific material that may be used at Green Bay.

3. Describe audit program of location of use at Green Bay.

4. I will tie down letters dated 4/3/96, 4/12/96, 6/3/96, and 8/29/96.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION: Kevin G. Null

SIGNATURE: Kevin G. Null

DATE: 12/16/96

ACTION TAKEN

SIGNATURE

TITLE

DATE

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

December 3, 1996

Ronald R. Bresell
Radiation Safety Officer
University of Wisconsin-Madison
Safety Department
30 North Murray Street
Madison, WI 53715

SUBJECT: ACKNOWLEDGEMENT OF CORRESPONDENCE
(Letter Dated 08/29/96)

Dear Licensee:

In response to your request, we have completed the initial processing, which is an administrative review of your application for a(n):

___ New License _X_ Amendment ___ Renewal
___ Termination ___ Auth User (Amendment not required)
___ Other_____

No administrative deficiencies were identified during this initial review. However, it should be noted that a technical review may identify omissions in the submitted information.

It appears that your request is routine (see 1-3 below, as applicable).

1. New and amendment actions are normally processed within 90 days, unless we find major deficiencies, or policy issues requiring central program office assistance.

2. Renewal actions are normally processed within 180 days, however, under timely filing (before expiration), you may continue to operate under your existing license.

3. Termination actions are normally processed within 90 days, unless confirmatory surveys following decontamination/decommissioning activities are involved.

A copy of your correspondence has been forwarded to our Licensing Fee and Debt Collection Branch (301/415-6097) for approval of the fee category and amount, if required.

If you have a compelling safety or business-related reason for requesting expedited review, please contact the Materials Licensing Branch at (630) 829-9887. We will try to complete your request as soon as practicable. Any correspondence about this request should reference the control number.

Nuclear Materials Support Branch

Mail Control No. 302085
License No. 48-09843-18