

ATOMIC ENERGY COMMISSION
BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

Page 1 of 1 Pages

License Number 05-00046-13

Amendment No. 35

Department of the Army
Fitzsimons Army Medical Center and
U. S. Army Medical Research and
Nutrition Laboratory
Denver, Colorado 80240

In accordance with telegram received January 24, 1975, License Number 05-00046-13
is amended as follows:

To add:

- | | | |
|----------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------|
| 6. Byproduct material (element and mass number) | 7. Chemical and/or physical form | 8. Maximum amount of radioactivity which licensee may possess at any one time |
| Z. Gold 198 | Z. Seeds | Z. 100 millicuries |
-
9. Authorized use
- Z. Interstitial treatment of carcinoma in one patient.

Wherever the words "Atomic Energy Commission" or "Commission" appear in this
license, except where the context of their use refers to a fact or event prior
to January 19, 1975, they mean the Nuclear Regulatory Commission created by
Public Law 93-438 and Executive Order No. 11834.

4 1975

For the U. S. Nuclear Regulatory Commission

~~Atomic Energy Commission~~

by *83*
Materials Branch 1-24-75

Directorate of Licensing 20555/
Washington, D. C. ~~20540~~

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PDR FOIA
GLADE96-395 PDR

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1 - FILE COPY

A. TYPE OF ACTION AND IDENTIFICATION CODES

| | | | | | | |
|-------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|-------------------------------|-----------------------------------|-------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> NEW LICENSE | <input type="checkbox"/> AMENDMENT TO RENEW LICENSE | <input type="checkbox"/> AMENDMENT TO TERMINATE | <input type="checkbox"/> VOID | DOCKET NUMBER 030-01233 | MAIL CONTROL NUMBER 54320 | CHANGE NAME ADDRESS <input type="checkbox"/> |
| <input type="checkbox"/> NEW LICENSE AND NEW LICENSEE | <input checked="" type="checkbox"/> OTHER AMENDMENT | <input type="checkbox"/> CLERICAL CHANGE NO AMENDMENT | | | | |

B. INDICATIVE INFORMATION:

| | | | | | | |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------|------------------------------------|-------------------|----|
| INDIVIDUALS | NAME (LAST, FIRST, MIDDLE) | NAME (LAST, FIRST, MIDDLE) | | | | |
| | NAME (LAST, FIRST, MIDDLE) | NAME (LAST, FIRST, MIDDLE) | | | | |
| | NAME (LAST, FIRST, MIDDLE) | NAME (LAST, FIRST, MIDDLE) | | | | |
| ORGANIZATIONS | ORGANIZATION NAME (ALPHABETIC SEQUENCE) Army, Department of the | | | | | |
| | DEPARTMENT OR BUREAU Fitzsimons Army Medical Center and U. S. Army Medical Research and Nutrition Laboratory | | | | | |
| ADDRESS | BUILDING, STREET | CITY Denver | STATE CO | ZIP CODE 80240 | | |
| | TYPE OF APPLICANT <input checked="" type="checkbox"/> U.S. GOVERNMENT AGENCY <input type="checkbox"/> INDIVIDUAL LICENSEE <input type="checkbox"/> ORGANIZATIONAL LICENSEE | DATE REQUEST RECEIVED 01/24/75 | INSTITUTION CODE 00046 | PENDING PROG. CODE | ACTUAL PROG. CODE | |
| SECONDARY PROGRAM CODES AS REQUIRED: | | | | | | |
| #1 | | #2 | | #3 | #4 | #5 |
| LICENSE NUMBER 05-00046-13 | | DATE LICENSE ISSUED OR ACTION COMPLETED 01 24 75 | | EXPIRATION DATE 04-30-79 | | |

C. STATISTICAL INFORMATION:

| | | | | | |
|-------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------------|-------------------|--------------------|
| MEDICAL CATEGORY: | | | | | |
| <input type="checkbox"/> FOR HUMAN USE ONLY | <input type="checkbox"/> FOR HUMAN AND NONHUMAN USE | <input type="checkbox"/> FOR NONHUMAN USE ONLY | | | |
| POSSESSION OF THE MATERIAL IS AUTHORIZED IN ONE OF THE FOLLOWING AREAS: | | | | | |
| <input type="checkbox"/> SAME AS "STATE" IN ADDRESS | <input type="checkbox"/> ALL STATES | <input type="checkbox"/> ALL NON-AGREEMENT STATES | | | |
| AND/OR IN THE STATE(S), TERRITORY(S), COUNTRY CHECKED BELOW: | | | | | |
| ALABAMA -AL | GEORGIA -GA | MARYLAND -MD | NEW JERSEY -NJ | SOUTH CAROLINA-SC | WYOMING -WY |
| ALASKA -AK | HAWAII -HI | MASSACHUSETTS-MA | NEW MEXICO -NM | SOUTH DAKOTA -SD | |
| ARIZONA -AZ | IDAHO -ID | MICHIGAN -MI | NEW YORK -NY | TENNESSEE -TN | AMERICAN SAMOA-AS |
| ARKANSAS -AR | ILLINOIS -IL | MINNESOTA -MN | NORTH CAROLINA-NC | TEXAS -TX | CANAL ZONE -CZ |
| CALIFORNIA -CA | INDIANA -IN | MISSISSIPPI -MS | NORTH DAKOTA -ND | UTAH -UT | GUAM -GU |
| COLORADO -CO | IOWA -IA | MISSOURI -MO | OHIO -OH | VERMONT -VT | PUERTO RICO -PR |
| CONNECTICUT -CT | KANSAS -KS | MONTANA -MT | OKLAHOMA -OK | VIRGINIA -VA | VIRGIN ISLANDS -VI |
| DELAWARE -DE | KENTUCKY -KY | NEBRASKA -NB | OREGON -OR | WASHINGTON -WA | |
| WASHINGTON, DC-DC | LOUISIANA -LA | NEVADA -NV | PENNSYLVANIA -PA | WEST VIRGINIA -WV | CANADA -CN |
| FLORIDA -FL | MAINE -ME | NEW HAMPSHIRE -NH | RHODE ISLAND -RI | WISCONSIN -WI | |

D. POSSESSION LIMITS OF SOURCE AND SPECIAL NUCLEAR MATERIALS AND TRITIUM

| SOURCE MATERIAL CEILING | | | | SNM CEILING | | | |
|-------------------------|--|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------|--|-----------------------------------------------------------|------------------------------------------------------------|
| AMOUNT | | UNIT | CONFIG. | AMOUNT | | UNIT | CONFIG. |
| U5 | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS | | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS |
| U3 | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS | | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS |
| PU | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS | | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS |
| UR | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS | | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS |
| TH | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS | | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS |
| | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS | | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS |
| | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS | | | <input type="checkbox"/> G <input type="checkbox"/> kg | <input type="checkbox"/> S <input type="checkbox"/> UNS |
| H3 | | <input type="checkbox"/> CURIES <input type="checkbox"/> MICROCURIES <input type="checkbox"/> M ³ CURIES | | RIS CODES | | | |

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5 - MEDICAL BYPRODUCT
REFERENCE COPY

A. TYPE OF ACTION AND IDENTIFICATION CODES

| | | | | | | |
|-------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|-------------------------------|-----------------------------------|-------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> NEW LICENSE | <input type="checkbox"/> AMENDMENT TO RENEW LICENSE | <input type="checkbox"/> AMENDMENT TO TERMINATE | <input type="checkbox"/> VOID | DOCKET NUMBER 600-01233 | MAIL CONTROL NUMBER 54320 | CHANGE NAME/ ADDRESS <input type="checkbox"/> |
| <input type="checkbox"/> NEW LICENSE AND NEW LICENSEE | <input checked="" type="checkbox"/> OTHER AMENDMENT | <input type="checkbox"/> CLERICAL CHANGE NO AMENDMENT | | | | |

B. INDICATIVE INFORMATION:

| | | | | | |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------|-------------------|-------------------|
| INDIVIDUAL | NAME (LAST, FIRST, MIDDLE) | NAME (LAST, FIRST, MIDDLE) | | | |
| | NAME (LAST, FIRST, MIDDLE) | NAME (LAST, FIRST, MIDDLE) | | | |
| | NAME (LAST, FIRST, MIDDLE) | NAME (LAST, FIRST, MIDDLE) | | | |
| ORGANIZATION | ORGANIZATION NAME (ALPHABETIC SEQUENCE) Army, Department of the | | | | |
| | DEPARTMENT OR BUREAU Department Army Medical Center and U. S. Army Medical Research and Development Laboratory | | | | |
| ADDRESS | BUILDING, STREET | CITY | STATE | ZIP CODE | |
| | Building | San Francisco | CA | 94304 | |
| APPLICANT | TYPE OF APPLICANT <input checked="" type="checkbox"/> U.S. GOVERNMENT AGENCY <input type="checkbox"/> INDIVIDUAL LICENSEE <input type="checkbox"/> ORGANIZATIONAL LICENSEE | DATE REQUEST RECEIVED 01/24/75 | INSTITUTION CODE 00046 | ENDING PROG. CODE | ACTUAL PROG. CODE |

SECONDARY PROGRAM CODES AS REQUIRED:

| | | | | |
|----|----|----|----|----|
| #1 | #2 | #3 | #4 | #5 |
|----|----|----|----|----|

| | | |
|--------------------------------------|-----------------------------------------|------------------------------------|
| LICENSE NUMBER 01-00046-11 | DATE LICENSE ISSUED OR ACTION COMPLETED | EXPIRATION DATE 04-30-79 |
|--------------------------------------|-----------------------------------------|------------------------------------|

| BY PRODUCT | FORM | USE | POS. LIMIT |
|--------------------|---------------------------------------------|------------------------------------------------------------------------------|-----------------------|
| 125 OR 131 | TRIODOOTHYRONINE AND THYROXINE | IN VITRO STUDIES | 2. 10000 |
| 125 OR 131 | IODIDE | THYROID IMAGING | |
| 125 OR 131 | I-131 | TREATMENT OF HYPERTHYROIDISM | |
| 125 OR 131 | I-131 | CARDIAC DYSFUNCTION AND THYROID CARCINOMA | |
| 125 OR 131 | I-131 | CISTERNOGRAPHY | |
| 99 OR 99m | THIOSULFATE | PLACENTA LOCALIZATION | |
| 99 OR 99m | LABELLED I-131 | TREATMENT OF LEUKEMIA, POLYCYTHEMIA, VERA, BONE METASTASES | |
| 99 OR 99m | COLLOIDAL THIOSULFATE | INTERSTITIAL TREATMENT OF CARCINOMA | in the patient |
| 2 99 OR 99m | COLLOIDAL SUSPENSION | INTRACAVITARY TREATMENT OF | |
| 99 OR 99m | ANY | LIBRARY REFERENCE | |
| 99 OR 99m | ENCASED IN NEEDLES AND/OR APPLICATION CELLS | FOR USE AS STANDARD FOR CALIBRATION PURPOSES | |
| 99 OR 99m | SEALED SOURCE | FOR USE IN MEDICAL APPLICATIONS FOR THE INTRACAVITARY TREATMENT OF CARCINOMA | |
| 99 OR 99m | SEALED SOURCE | TREATMENT OF SUPERFICIAL EYE DISEASES | |
| 99 OR 99m | PERTECHNETATE | LIVER AND GALLBLADDER IMAGING | |
| 99 OR 99m | SULFUR COLLOID | LIVER AND GALLBLADDER IMAGING | |
| 99 OR 99m | DTPA | KIDNEY IMAGING | |
| 99 OR 99m | MHSA | LUNG IMAGING | |
| 99 OR 99m | LABELLED POLYPHOSPHATE | BONE IMAGING | |
| 99 OR 99m | DTPA (8m) | KIDNEY FUNCTION, KIDNEY IMAGING | |
| 99 OR 99m | MAA | BRAIN IMAGING | |
| 99 OR 99m | LABELLED DISODIUM PHOSPHATE | LUNG IMAGING | |
| 99 OR 99m | Mo 99 | BONE IMAGING | |
| 99 OR 99m | Mo 99/Tc 99m GENERATORS | PRODUCTION OF Tc 99m PERTECHNETATE | |
| 99 OR 99m | C 14 | | |
| 99 OR 99m | H 3 | | |
| 99 OR 99m | ANY | IN VITRO STUDIES, ANIMAL STUDIES | |
| 99 OR 99m | SELENIOMETHIONINE | PANCREAS IMAGING | |
| 99 OR 99m | FREE GAS OR SOLUTION | BLOOD FLOW STUDIES | |
| 99 OR 99m | SEEDS ENCAPSULATED IN POLYMER GEL | POLYGRAPHY FUNCTION STUDIES | |
| 99 OR 99m | U-192 | GROUP II | |
| 99 OR 99m | Group I | GROUP I | |
| 99 OR 99m | Group II | GROUP II | |
| 99 OR 99m | Group III | GROUP III | |
| 99 OR 99m | Group IV | GROUP IV | |
| 99 OR 99m | Group V | GROUP V | |
| 99 OR 99m | Group VI | GROUP VI | |
| 99 OR 99m | Group VII | GROUP VII | |
| 99 OR 99m | Group VIII | GROUP VIII | |
| 99 OR 99m | Group IX | GROUP IX | |
| 99 OR 99m | Group X | GROUP X | |
| 99 OR 99m | Group XI | GROUP XI | |
| 99 OR 99m | Group XII | GROUP XII | |
| 99 OR 99m | Group XIII | GROUP XIII | |
| 99 OR 99m | Group XIV | GROUP XIV | |
| 99 OR 99m | Group XV | GROUP XV | |
| 99 OR 99m | Group XVI | GROUP XVI | |
| 99 OR 99m | Group XVII | GROUP XVII | |
| 99 OR 99m | Group XVIII | GROUP XVIII | |
| 99 OR 99m | Group XIX | GROUP XIX | |
| 99 OR 99m | Group XX | GROUP XX | |
| 99 OR 99m | Group XXI | GROUP XXI | |
| 99 OR 99m | Group XXII | GROUP XXII | |
| 99 OR 99m | Group XXIII | GROUP XXIII | |
| 99 OR 99m | Group XXIV | GROUP XXIV | |
| 99 OR 99m | Group XXV | GROUP XXV | |
| 99 OR 99m | Group XXVI | GROUP XXVI | |
| 99 OR 99m | Group XXVII | GROUP XXVII | |
| 99 OR 99m | Group XXVIII | GROUP XXVIII | |
| 99 OR 99m | Group XXIX | GROUP XXIX | |
| 99 OR 99m | Group XXX | GROUP XXX | |

MATERIALS INPUT ML .CAL

5 - MEDICAL BYPRODUCT
REFERENCE COPY

A. TYPE OF ACTION AND IDENTIFICATION CODES

| | | | | | | |
|-------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------|-------------------------------|-----------------------------------|-------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> NEW LICENSE | <input type="checkbox"/> AMENDMENT TO RENEW LICENSE | <input type="checkbox"/> AMENDMENT TO TERMINATE | <input type="checkbox"/> VOID | DOCKET NUMBER 600-01233 | MAIL CONTROL NUMBER 34220 | CHANGE NAME/ ADDRESS <input type="checkbox"/> |
| <input type="checkbox"/> NEW LICENSE AND NEW LICENSEE | <input checked="" type="checkbox"/> OTHER AMENDMENT | <input type="checkbox"/> CLERICAL CHANGE NO AMENDMENT | | | | |

B. INDICATIVE INFORMATION

| | |
|----------------------------|----------------------------|
| NAME (LAST, FIRST, MIDDLE) | NAME (LAST, FIRST, MIDDLE) |
| NAME (LAST, FIRST, MIDDLE) | NAME (LAST, FIRST, MIDDLE) |
| NAME (LAST, FIRST, MIDDLE) | NAME (LAST, FIRST, MIDDLE) |

ORGANIZATION NAME (ALPHABETIC SEQUENCE)

Army, Department of the

DEPARTMENT OR BUREAU

Naval Medical Center and U. S. Army Medical Research and Development Command

BUILDING, STREET

CITY

STATE

ZIP CODE

TYPE OF APPLICANT

- ☒ U.S. GOVERNMENT AGENCY
☐ INDIVIDUAL LICENSEE
☐ ORGANIZATIONAL LICENSEE

DATE REQUEST RECEIVED

6/24/73

INSTITUTION CODE

60013

PENDING PROG. CODE

ACTUAL PROG. CODE

SECONDARY PROGRAM CODES AS REQUIRED:

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

LICENSE NUMBER

60-0000-01

DATE LICENSE ISSUED OR ACTION COMPLETED

EXPIRATION DATE

04-30-79

BY PRODUCT

FORM

USE

POSSE. LIMIT

| | | | |
|------------|---------------------------------------------|------------------------------------------------------------------------------|----------|
| 125 OR 127 | DIETHYLDITHIONINE AND DIETHYLTHIOCARBONATE | IN VITRO STUDIES | 2. 100mc |
| 125 | DIETHYLDITHIONINE | THYROID IMAGING | |
| 125 | DIETHYLDITHIONINE | TREATMENT OF HYPERTENSION | |
| 125 | DIETHYLDITHIONINE | CARDIAC FUNCTION AND MYOCARDIAL CARCINOMA | |
| 125 | DIETHYLDITHIONINE | CISTERNOGRAPHY | |
| 125 | DIETHYLDITHIONINE | PLACENTA LOCALIZATION | |
| 125 | DIETHYLDITHIONINE | TREATMENT OF ANEMIA, POLYCYTHEMIA | |
| 125 | DIETHYLDITHIONINE | VERA BONE METASTASES | |
| 2 | 2. 100mc | 2. INTERSTITIAL TREATMENT OF CARCINOMA in one patient | |
| 125 | COLLOIDAL SUSPENSION | INTRACAVITARY TREATMENT OF MALIGNANT EFFUSIONS | |
| 125 | ANY | FOR USE AS A STANDARD FOR CALIBRATION PURPOSES | |
| 125 | ENCASED IN NEEDLES AND/OR APPLICATION CELLS | FOR USE IN MEDICAL APPLICATIONS FOR THE INTRACAVITARY TREATMENT OF CARCINOMA | |
| 125 | SEALING SOURCE | TREATMENT OF SUPERFICIAL EYE DISEASES | |
| 125 | PERTECHNETATE | LIVER AND SPLEEN IMAGING | |
| 125 | SULFUR COLLOID | KIDNEY IMAGING | |
| 125 | DTPA | LUNG IMAGING | |
| 125 | MHSA | BONE IMAGING | |
| 125 | LABELLED POLYHYDROXYMETHACRYLATE | KIDNEY FUNCTION, KIDNEY IMAGING | |
| 125 | DTPA (Ga) | BRAIN IMAGING | |
| 125 | MAA | LUNG IMAGING | |
| 125 | LABELLED DIETHYLDITHIONATE | BONE IMAGING | |
| 125 | Mo 99 | PRODUCTION OF Tc 99m PERTCHNETATE | |
| 125 | Mo 99/Tc 99m GENERATORS | | |
| 125 | ANY | IN VITRO STUDIES, ANIMAL STUDIES | |
| 125 | SELENIODITHIONINE | PANCREAS IMAGING | |
| 125 | FREE GAS OR SOLUTION | BLOOD FLOW STUDIES | |
| 125 | BLOOD ENCAPSULATED IN POLYMER BEADS | PLASMA FLOW STUDIES | |
| 125 | GROUP I | GROUP I | |
| 125 | GROUP II | GROUP II | |
| 125 | GROUP III | GROUP III | |
| 125 | GROUP IV | GROUP IV | |
| 125 | GROUP V | GROUP V | |
| 125 | GROUP VI | GROUP VI | |