

PALMERTON & PARRISH, INC.

Civil, Geotechnical & Materials Engineers Testing Laboratories & Environmental Services

Fred E. Palmerton, PE
Brad R. Parrish, PE
Ronald Abbiatti, Geologist
Michael G. Andress

4166 W. Kearney Springfield, MO 65803 417-864-6000, FAX 417-864-6004
3500 East 13th Street Joplin, MO 64801 417-624-2005, FAX 417-624-5530
10,000 Hwy 160 Walnut Shade, MO 65771 417-335-6011, FAX 417-561-8400

Specializing In:

Geotechnical Foundation
Materials of Construction
Hydrology-Drainage
Core Drilling
Environmental Audits

February 5, 2008

Materials Licensing Section
US Nuclear Regulatory Commission Region III
801 Warrenville Road
Oisle, Illinois 60532-4351

RE: Amendment to Licence #24-25998-01

Attached, please find two copies of our application to amend license #24-25998-01. There are two basic reasons for this amendment. The first is that we have built a new office and laboratory building next to our former building and have a new address. See Attachment A-1, which is the drawing showing the revised location for gauge storage in our Springfield facility.

The second purpose is to change the name of the primary Radiation Safety Officer from Ron Abbiatti to Michael R. Foley. Previously, Mr. Abbiatti has been the primary Radiation Safety Officer and Mr. Foley, his assistant. If this amendment is approved, the positions will be reversed, with Mr. Foley being the primary Radiation Safety Officer, assisted by Mr. Abbiatti.

It is our understanding that no license fee is required. However, if our understanding is incorrect, please contact us and a check will be submitted.

PALMERTON & PARRISH, INC.

By:



Fred E. Palmerton, P. E.

FEP:jb

Attachments

RECEIVED FEB 29 2008

(7-98)
10 CFR 30, 32, 33
34, 35, 36, 39 and 40

Estimated burden per response to comply with this information collection request: 7 hours. Submission of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Forward comments regarding burden estimate to the Information and Records Management Branch (7-4 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0120), Office of Management and Budget, Washington, DC 20503. NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

APPLICATION FOR MATERIAL LICENSE

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.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA, RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION
NUCLEAR MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION II
101 MARIETTA STREET, NW, SUITE 2600
ATLANTA, GA 30323-0169

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
801 WARRENVILLE RD.
LISLE, IL 60532-4881

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
811 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 75011-5084

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

<p>1. THIS IS AN APPLICATION FOR (Check appropriate item)</p> <p><input type="checkbox"/> A. NEW LICENSE</p> <p><input checked="" type="checkbox"/> B. AMENDMENT TO LICENSE NUMBER <u>24-25998-01</u></p> <p><input type="checkbox"/> C. RENEWAL OF LICENSE NUMBER _____</p>	<p>2. NAME AND MAILING ADDRESS OF APPLICANT (include Zip code)</p> <p>PALMERTON & PARRISH, INC. 4168 W KEARNEY ST SPRINGFIELD MO 65803</p>
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<p>3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED</p> <p>PALMERTON & PARRISH, INC. 4168 W KEARNEY ST SPRINGFIELD MO 65803 PLUS 2 ADDITIONAL LOCATIONS PH: 417-864-6000 SEE ATTACHMENT A</p>	<p>4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION</p> <p>FRED E. PALMERTON, P.E.</p> <p>TELEPHONE NUMBER 417-864-6000</p>
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SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

<p>5. RADIOACTIVE MATERIAL. SEE ATTACHMENT B</p> <p>a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.</p>	<p>6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED. SEE ATTACHMENT C</p>				
<p>7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE. SEE ATTACHMENT C</p>	<p>8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS. SEE ATTACHMENT D</p>				
<p>9. FACILITIES AND EQUIPMENT. SEE ATTACHMENT D</p>	<p>10. RADIATION SAFETY PROGRAM. SEE ATTACHMENT E</p>				
<p>11. WASTE MANAGEMENT. SEE ATTACHMENT F</p>	<p>12. LICENSEE FEES (See 10 CFR 170 and Section 170.31)</p> <table border="1"> <tr> <td>FEE CATEGORY</td> <td>AMOUNT ENCLOSED \$</td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	FEE CATEGORY	AMOUNT ENCLOSED \$		
FEE CATEGORY	AMOUNT ENCLOSED \$				

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39 AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 82 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.

<p>CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE</p> <p>FRED E. PALMERTON, P.E., VICE PRESIDENT</p>	<p>SIGNATURE</p> 	<p>DATE</p> <p>2/5/08</p>
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FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
			\$		
APPROVED BY				DATE	

PALMERTON & PARRISH, INC.
Application for Renewal to NRC Materials License #24-25998-01
Attachment Sheet A

Item 3: Addresses where licensed material will be used or possessed.

- 1. The licensed material, in it's sealed condition will be stored at our laboratories which are located as follows:**

Palmerton & Parrish, Inc. (See Attachment A-1)
4168 W Kearney St
Springfield, Missouri 65803

Palmerton & Parrish, Inc. (See Attachment A-2)
3500 E 13th Street
Joplin, Missouri 64801

Palmerton & Parrish, Inc. (See Attachment A-3)
10,000 Highway 160
Walnut Shade, Missouri 65771

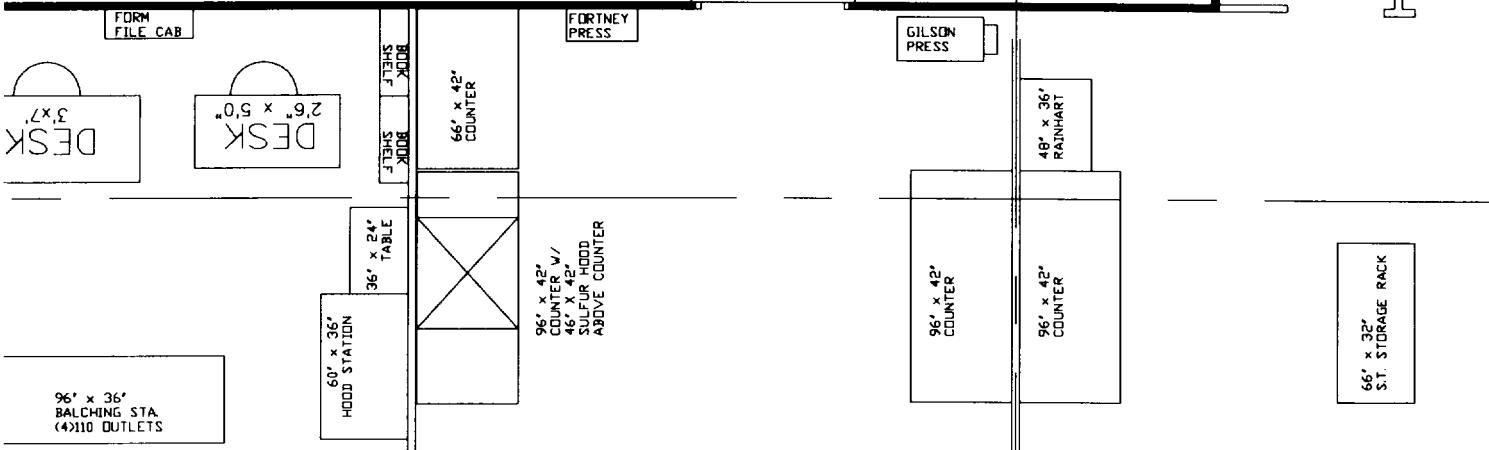
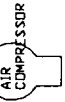
- 2. The devices will be used at temporary job sites in States subject to NRC's regulatory authority.**

PALMERTON & PARRISH, INC.
4168 W Kearney St.
Springfield, Missouri 65803
January 16, 2008

S:\Geotech-Environmental\Donny_Drawings\Nuclear Storage.dwg

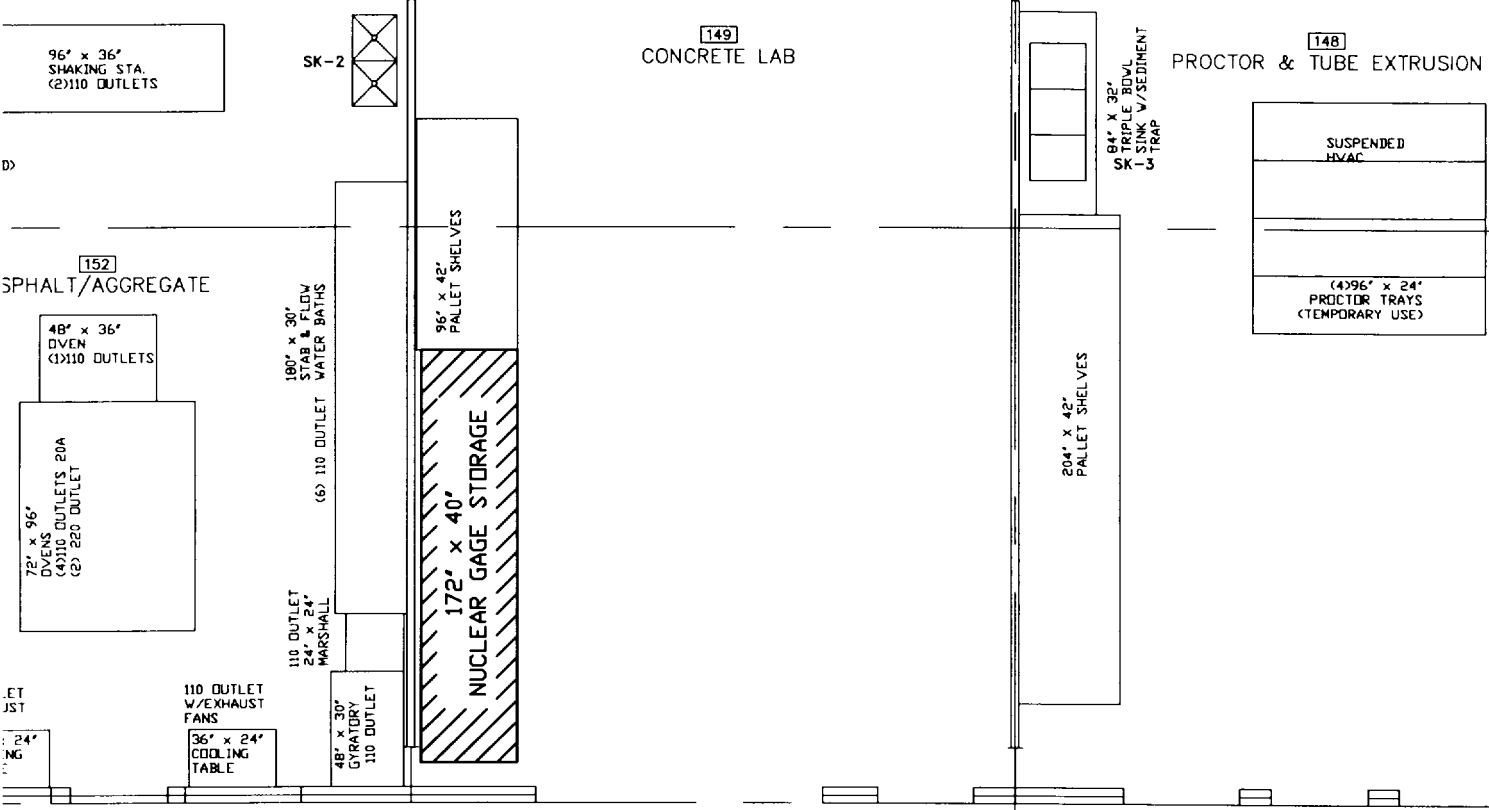
151
CUL STORAGE

146
RESTROOM



149
CONCRETE LAB

148
PROCTOR & TUBE EXTRUSION



4

3



SCALE
1"=80'

Palmerton & Parrish, Inc.
 4168 West Kearney Street
 Springfield, MO 65803
 (417) 864-6000

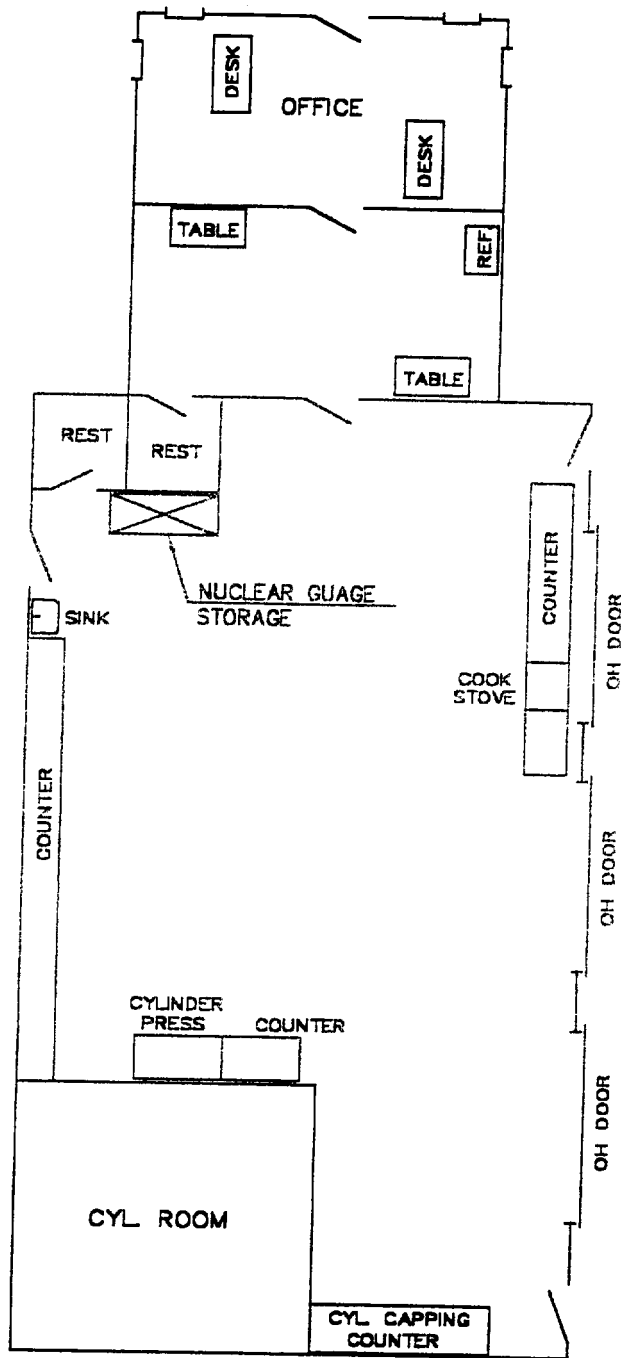
ATTACHMENT A-1
 DATE: JANUARY 16, 2008

PALMERTON & PARRISH, INC.

JOPLIN OFFICE

3416 EAST 13TH ST. - JOPLIN, MO.

(417) 824-2005



ATTACHMENT A-2

5/28/2003

NUCJOPDWG

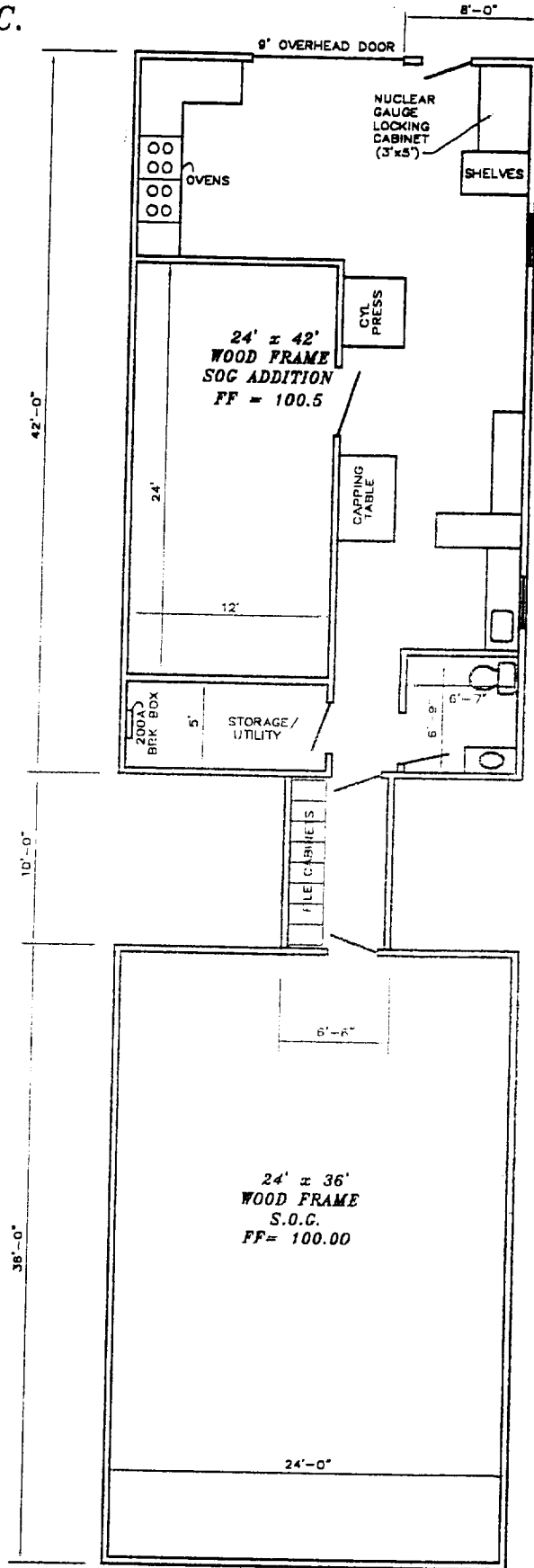
SCALE: 1" = 10'

PALMERTON & PARRISH, INC.
SPRINGFIELD OFFICE

10000 W. HWY 160 - WALNUT SHADE, MO

(417) 864-6000

ATTACHMENT A-3



SCALE: 1" = 10'

PALMERTON & PARRISH, INC.
Application for Renewal to NRC Materials License #24-25998-01
Attachment Sheet B

Item 5: Radioactive material to be possessed

	Byproduct	Chemical/Physical Form	Maximum Amount Per Source
1	Cesium-137	Sealed Source (Troxler Electronic Laboratories, Inc., Drawing No. A 102112)	Any one source not-to-exceed 10 millicuries
2	Americium-241	Sealed Source (Troxler Electronic Laboratories, Inc., Drawing No. A 102451)	Any one source not-to-exceed 50 millicuries
3	Cesium-137	Sealed Source (Humbolt Drawing No. 2200064)	Any one source not-to-exceed 11 millicuries
4	Americium-241	Sealed Source (Humbolt Drawing No. 2200067)	Any one source not-to-exceed 44 millicuries
5	Americium- 241	Sealed Source (Troxler Electronic Laboratories, Inc., Drawing No. 100608)	Any one source not-exceed 110 millicuries

PALMERTON & PARRISH, INC.
4168 W Kearney St.
Springfield, Missouri 65803
January 16, 2008

PALMERTON & PARRISH, INC.
Application for Renewal to NRC Materials License #24-25998-01
Attachment Sheet C

Item 6: Purpose for which Material Licenses will be used.

We use the various moisture-density gauges for measuring moisture and density of soil, asphalt, concrete, baserock and coal.

Item 7: Individuals responsible for Radiation Safety Program, their training and experience.

Our firm's Radiation Safety Program will be the responsibility of Michael R. Foley, the company's Radiation Safety Officer, Mr. Ronald M. Abbiatti will act as the Assistant RSO. Mr. Foley has completed the Basic Training Course on Radiation Safety and Use of Nuclear Soil Gauges given by Humbolt Scientific, Inc. SEE ATTACHED CERTIFICATES.

Both Mr. Abbiatti and Mr. Foley have attended and completed a one (1) day Radiation Safety Officer Training Class sponsored by Humbolt Scientific, Inc., held on June 8, 2006 in Springfield, Missouri.

PALMERTON & PARRISH, INC.
4168 W Kearney St.
Springfield, Missouri 65803
January 16, 2008



HUMBOLDT

HUMBOLDT SCIENTIFIC, INC.

HAZMAT TRAINING CERTIFICATION

Michael Foley

**HAS SUCCESSFULLY COMPLETED A HAZMAT REFRESHER COURSE,
WHICH INCLUDED TRAINING AND TESTING ON THE TRANSPORTATION
REQUIREMENTS OF PORTABLE MOISTURE/DENSITY GAUGES.**

Training Topics:

General Awareness

49CFR100-177

Training Requirements

Safety

Emergency Response

Commercial Truck/Air

Specific

Shipping Name

Packaging

Labeling

Marking

Shipping Papers

Driver

Inspection

Security

Bracing

Safety

Shipping Paper Location

Date of Training: **January 12, 2004**

Location: **Springfield, MO**

Certificate Number: **4593**

HAZMAT Expiration Date: **January 12, 2007**

Eddie G. Hall

Instructor: Eddie G. Hall

Humboldt Scientific, Inc.

551 -D Pylon Drive

Raleigh, NC 27606



HUMBOLDT SCIENTIFIC, INC.
RSO Certification

Michael R. Foley

**HAS SUCCESSFULLY COMPLETED A CERTIFIED
RADIATION SAFETY OFFICER COURSE**

Subjects included were:

RSO Duties and Responsibilities

Radiation Safety Practices

Regulatory Requirements

Dose/Shielding Requirements

Accidents/Storage

Regulatory Guidance (NUREG-1556, Vol. 1)

Transportation/HAZMAT Requirements

Risk

ALARA

Radiation Measurement

Operating and Emergency Procedures

Calibration and Maintenance

Record Keeping

Eddie G. Hall

Date of Training: **June 8, 2006**

Location: **Springfield, MO**

Certificate Number: **6528**

HAZMAT Expiration Date: **June 8, 2009**

Instructor: **Eddie G. Hall**

Humboldt Scientific, Inc.

551-D Pylon Drive

Raleigh, NC 27606



HUMBOLDT SCIENTIFIC, INC.
RSO Certification

Ronald M. Abbiatti

**HAS SUCCESSFULLY COMPLETED A CERTIFIED
RADIATION SAFETY OFFICER COURSE**

Subjects included were:

RSO Duties and Responsibilities

Radiation Safety Practices

Regulatory Requirements

Dose/Shielding Requirements

Accidents/Storage

Regulatory Guidance (NUREG-1556, Vol. 1)

Transportation/HAZMAT Requirements

Risk

ALARA

Radiation Measurement

Operating and Emergency Procedures

Calibration and Maintenance

Record Keeping

Eddie G. Hall

Date of Training: **June 8, 2006**

Location: **Springfield, MO**

Certificate Number: **6527**

HAZMAT Expiration Date: **June 8, 2009**

Instructor: **Eddie G. Hall**

Humboldt Scientific, Inc.

551-D Pylon Drive

Raleigh, NC 27606



HUMBOLDT SCIENTIFIC, INC.
Nuclear Gauge Training Certification

Ronald M. Abbiatti

**HAS SUCCESSFULLY COMPLETED A CERTIFIED COURSE ON RADIATION
SAFETY, TRANSPORT AND OPERATION OF INSTRUMENTS USING
GAMMA AND NEUTRON RADIATION TO MEASURE THE
PHYSICAL PROPERTIES OF CONSTRUCTION MATERIALS**

Subjects included were:

Types and basic unit of ionizing radiation.
Calculations related to radiation safety.
Biological effects of radiation.
Methods of protection.
Leak testing procedures.
Procedures for safe transport and storage.
Federal and State Regulations.

Accident prevention and procedures.
Instrument theory and operation.
Limitations of field maintenance.
Instrument standardization and calibration.
Test site selection and preparation.
Field operation and calculations.
Types and reasons for measurement errors.

Eddie G. Hall

Date of Training: May 11, 1999
Location: Springfield, MO
Certificate Number: 1753

Instructor: Eddie G. Hall
Humboldt Scientific, Inc.
551-D Pylon Drive
Raleigh, NC 27606

PALMERTON & PARRISH, INC.
Application for Renewal to NRC Materials License #24-25998-01
Attachment Sheet D

Item 3: Training provided to other users.

Each employee of Palmerton & Parrish, Inc., will complete a device manufacturer's training program prior to being allowed to use the device. When employment ceases a record documenting the training of the individual employee will be maintained (from the date training is completed) for a period of five (5) years.

Item 9: Facilities and equipment.

We currently own seventeen (17) of these devices. Units are stored in locked cabinets in the Springfield, Joplin and Walnut Shade Laboratories when not in use. These cabinets are away from permanent work stations. When in transit or used on the job site, the device(s) is/are either kept under constant surveillance or are placed in a locked vehicle (away from the driver), a locked job office or a locked shed.

PALMERTON & PARRISH, INC.
4168 W Kearney St.
Springfield, Missouri 65803
January 16, 2008

PALMERTON & PARRISH, INC.
Application for Renewal to NRC Materials License #24-25998-01
Attachment Sheet E

Item 10: Radiation Safety Program

- 10.1 Personnel Monitoring Equipment:** We are using a monitoring system operated by ICN Dosimetry Services, PO Box 20889, Fountain Valley, CA 92782-0889. All of our personnel who use these devices will be furnished Personal Badge Type 1.3 T.L.D. Michael Foley is responsible for sending these badges to ICN on a quarterly basis. They will maintain and furnish us will reports for each employee plus a control. Employees will be furnished the results of this testing on a regular basis.
- 10.2 Leak testing** will be performed at six (6) month intervals by the Safety Officer using kits supplied by Troxler Electronic Laboratories, Inc. Leak tests are also performed when the units are sent for repair for calibration.
- 10.3 Maintenance:** We do not perform any maintenance that requires removing the source from the devise or taking the out of the safe shielded position. All cleaning is performed with the source in a safe shielded position.
- 10.4 Transportation:** Packaging and transporting of licensed material on commercial carriers will be carried out in strict accordance with DOT Regulations.
- 10.5 Emergency and Operating Procedures:** Palmerton & Parrish, Inc., has prepared operating and emergency procedures for use of these devises. These procedures include a statement that all employees shall wear the personal dosimeters when using the machine, a description, (normally as supplied by the manufacturer) for the proper use and handling of the devise(s). Procedures for storage, transportation to and from work sites and emergency procedures including individuals to be notified are included. Emergency procedures and phone numbers are posted on the reverse side of the shipping papers for each of our devices.
- 10.6 Our emergency response contract after hours and at times we cannot be reached is:**

Infotrac Chemical Emergency Response Center
200 North Palmetto St.
Leesburg, FL USA 34748
1-800-535-5053

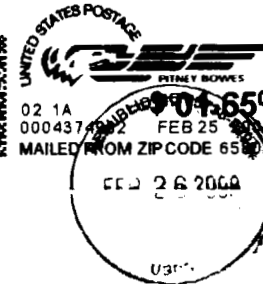
PALMERTON & PARRISH, INC.
4168 W Kearney St.
Springfield, Missouri 65803
January 16, 2008

PALMERTON & PARRISH, INC.
Application for Renewal to NRC Materials License #24-25998-01
Attachment Sheet F

Item 11: Waste Disposal

Disposal of any device containing licensed material will be by transfer of the device and material to a licensed party specifically authorized to possess it. This would normally be via trade-in to a licensed moisture-density gauge manufacturer.

PALMERTON & PARRISH, INC.
4168 W Kearney St.
Springfield, Missouri 65803
January 16, 2008



First Class Mail

PALMERTON & PARRISH, INC.
4166 WEST KEARNEY
SPRINGFIELD, MO 65803
PHONE: (417) 864-6000 • FAX: (417) 864-6004

TO: MATERIALS LICENSING SECTION
US NUCLEAR REGULATORY COM REGION III
2443 WARRENVILLE RD STE 210
LISLE IL 60532