



Patriot Coal Corporation
63 Corporate Centre Dr.
PO Box 1001
Scott Depot, West Virginia 25560
304.380-0200
www.patriotcoal.com

September 21, 2015

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
2100 Renaissance Boulevard, Suite 100
King of Prussia, PA 19406-2713

Br. 2

Cert. Mail 7006 2150 0000 7791 8650

RE: RENEWAL OF LICENSE NO. 47-23053-01
EASTERN ASSOCIATED COAL, LLC

103020218

REC RG 1 09 25 15 AM 07 24

Dear Sir;

Attached please find the completed Application for Materials License, Renewal of License Number 47-23053-01.

If you have any questions, or if you require additional information please call me at 304-340-1865.

Sincerely,

Mark Akers
Manager Environmental Compliance

XC: V. Donato
M. Kalos
File

588971
NUCLEAR MATERIALS-002

(07-2015)
10 CFR 30, 32, 33, 34
35, 36, 37, 39, and 40



APPLICATION FOR MATERIALS LICENSE

Estimated burden per response to comply with this mandatory collection request: 4.3 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the FOIA, Privacy, and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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. *AMENDMENTS/RENEWALS THAT INCREASE THE SCOPE OF THE EXISTING LICENSE TO A NEW OR HIGHER FEE CATEGORY WILL REQUIRE A FEE.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

OFFICE OF FEDERAL & STATE MATERIALS AND ENVIRONMENTAL MANAGEMENT PROGRAMS
DIVISION OF MATERIALS SAFETY AND STATE AGREEMENTS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,

SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PA 19406-2713

IF YOU ARE LOCATED IN:

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

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MISSISSIPPI, 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 BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
1600 E. LAMAR BOULEVARD
ARLINGTON, TX 76011-4511

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.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

A. NEW LICENSE

B. AMENDMENT TO LICENSE NUMBER

C. RENEWAL OF LICENSE NUMBER 47-23053-01

2. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)

*Eastern Associated Coal, LLC
Environmental Department
63 Corporate Centre Drive
Scott Depot, WV 25560*

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

*EAC, LLC
Federal No. 2 Mine
1044 Miracle Run Road
Fairview, WV 26570*

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Vince Donato

BUSINESS TELEPHONE NUMBER: *304-368-9985*

BUSINESS CELLULAR TELEPHONE NUMBER: _____

BUSINESS EMAIL ADDRESS: *vdonato@patriotcoal.com*

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.

5. RADIOACTIVE MATERIAL

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (Fees required only for new applications, with few exceptions*)
(See 10 CFR 170 and Section 170.31)

FEE CATEGORY: 3P 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, 37, 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 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER -- TYPED/PRINTED NAME AND TITLE

*Mark Akers
Manager Environmental Compliance*

SIGNATURE

Mark Akers

DATE

9/21/15

FOR NRC USE ONLY					
TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
APPROVED BY				DATE	



CERTIFICATE OF DISPOSITION OF MATERIALS

Estimated burden per response to comply with this mandatory collection request: 30 minutes. This submittal is used by NRC as part of the basis for its determination that the facility is released for unrestricted use. Send comments regarding burden estimate to the FOIA, Privacy, and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollections.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0028), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE NAME AND ADDRESS	LICENSE NUMBER	DOCKET NUMBER
	LICENSE EXPIRATION DATE	

A. LICENSE STATUS (Check the appropriate box)

- This license has expired. This license has not yet expired; please terminate it.

B. DISPOSAL OF RADIOACTIVE MATERIAL

(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

- 1. No radioactive materials have ever been procured or possessed by the licensee under this license.
- 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner:
 - a. Transfer of radioactive materials to the licensee listed below:

 - b. Disposal of radioactive materials:
 - 1. Directly by the licensee:

 - 2. By licensed disposal site:

 - 3. By waste contractor:

 - c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

C. SURVEYS PERFORMED AND REPORTED

- 1. A radiation survey was conducted by the licensee. The survey confirms:
 - a. the absence of licensed radioactive materials
 - b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.
- 2. A copy of the radiation survey results:
 - a. is attached; or b. is not attached (Provide explanation); or c. was forwarded to NRC on: _____ Date
- 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and
 - a. The results of the latest leak test are attached; and/or
 - b. No leaking sources have ever been identified.

The person to be contacted regarding the information provided on this form:

NAME	TITLE	TELEPHONE (Include Area Code)	E-MAIL ADDRESS
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Mail all future correspondence regarding this license to:

C. CERTIFYING OFFICIAL

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE	SIGNATURE	DATE
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WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 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.

Suggested Format for Providing Information Requested in Items 5 Through 11 of NRC Form 313

Table B.1 Items 5 & 6: Materials To Be Possessed and Proposed Uses

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
		Cobalt-60	Sealed source manufacturer or distributor and model number: Device manufacturer or distributor and model number:	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes [] Specific description of the gauge use: _____ _____ _____	[] Not applicable _____ [] Uses are: _____ (Submit safety analysis supporting safe use)
		Krypton-85	Sealed source manufacturer or distributor and model number: Device manufacturer or distributor and model number:	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes [] Specific description of the gauge use: _____ _____ _____	[] Not applicable _____ [] Uses are: _____ (Submit safety analysis supporting safe use)
		Strontium-90	Sealed source manufacturer or distributor and model number: Device manufacturer or distributor and model number:	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes [] Specific description of the gauge use: _____ _____ _____	[] Not applicable _____ [] Uses are: _____ (Submit safety analysis supporting safe use)
		Cesium-137 <i>Isotope Prod / Texas Nuclear</i> <i>Ronan SAI-C5 /</i>	Sealed source manufacturer or distributor and model number: Device manufacturer or distributor and model number: <i>Thermo Measure</i> <i>Tech TN5201</i>	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes [] Specific description of the gauge use: _____ _____ _____	[] Not applicable _____ [] Uses are: _____ (Submit safety analysis supporting safe use)

APPENDIX B

Yes	No	Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed on SSD Certificate	Specify Other Uses Not Listed on SSD Certificate
		Americium-241	Sealed source manufacturer or distributor and model number: Device manufacturer or distributor and model number:	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes <input type="checkbox"/> Specific description of the gauge use: _____ _____ _____ _____	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use)
		Other Isotope (Specify): <i>Californium 252</i>	Sealed source manufacturer or distributor and model number: <i>Isotope Prod.</i> Device manufacturer or distributor and model number: <i>Thermo Gamma Metrics CB-H1</i>	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes <input type="checkbox"/> Specific description of the gauge use: _____ _____ _____ _____	<input type="checkbox"/> Not applicable <input type="checkbox"/> Uses are: (Submit safety analysis supporting safe use)
<i>Financial Assurance Required and Evidence of Financial Assurance Provided</i>						

Table B.2 Items 7 Through 11: Training and Experience, Facilities and Equipment, Radiation Safety Program, and Waste Disposal

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
<p>7. Individual(s) Responsible For Radiation Safety Program And Their Training And Experience</p> <p>7.1 Radiation Safety Officer</p> <p>Name: <u>J. Vincent Donato</u></p>	<p>Before obtaining licensed materials, the proposed RSO will have successfully completed the training described in Criteria in the section entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience - Radiation Safety Officer" in NUREG-1556, Vol. 4, dated October 1998.</p> <p style="text-align: center;">AND</p> <p>Before being named as the RSO, future RSOs will have successfully completed the training described in Criteria in the section entitled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience - Radiation Safety Officer" in NUREG-1556, Vol. 4, dated October 1998. Within 30 days of naming a new RSO, we will submit the new RSO's name to NRC to include in our license.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>7. Individual(s) Responsible For Radiation Safety Program And Their Training And Experience</p> <p>7.2 Authorized Users</p>	<p>PROPOSED AUTHORIZED USERS:</p> <p>Before using licensed materials, authorized users will have successfully completed the training described in Criteria in the section entitled, "Authorized Users" in NUREG-1556, Vol. 4, dated October 1998.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>8. Training for Individuals Who in the Course of Employment are Likely to Receive Occupational Doses of Radiation in Excess of 1 mSv (100 mrem) in a Year (Occupationally Exposed Workers) and Ancillary Personnel</p>	<p>The applicant is <i>not</i> required to, and should not, submit is training program, for individuals who in the course of employment are likely to receive occupational doses of radiation in excess of 1 mSv (100 mrem) in a year (occupationally exposed workers) and ancillary personnel, to the NRC for review during the licensing phase.</p>	<p>Need Not Be Submitted with Application</p>	

Certificate of Course Completion

This certifies that

Vince Donato

*has completed the SABIA, Inc
Radiation Safety Officer
Training Course*

*SABIA, Inc
10911 Technology Place
San Diego, CA 92127
858-217-2200*

John W. Hagley

Instructor

August 20, 2014

Date

APPENDIX B

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
9. Facilities and Equipment	We will ensure that the location of each fixed gauge meets the Criteria in the section entitled "Facilities and Equipment" in NUREG-1556, Vol. 4, dated October 1998.	<input checked="" type="checkbox"/>	[]
10. Radiation Safety Program - Audit Program	The applicant is <i>not</i> required to, and should not, submit its audit program to the NRC for review during the licensing phase.	Need Not Be Submitted with Application	
10. Radiation Safety Program - Survey Instruments	<p>Surveys pursuant to 10 CFR 20.1501 will be performed by a person specifically authorized by the NRC or an Agreement State to perform these surveys.</p> <p style="text-align: center;">OR</p> <p>We will use instruments that meet the Criteria in the section entitled "Radiation Safety Program - Instruments," in NUREG-1556, Vol. 4, dated August 1998, and <i>one</i> of the following:</p> <p>Each survey meter will be calibrated by the manufacturer or other person authorized by the NRC or an Agreement State to perform survey meter calibrations.</p> <p style="text-align: center;">OR</p> <p>We will implement the model survey instrument calibration program in Appendix I to NUREG-1556, Vol. 4, dated October 1998.</p>	<input checked="" type="checkbox"/>	[]
10. Radiation Safety Program - Material Receipt and Accountability	Physical inventories will be conducted at intervals not to exceed 6 months or at other intervals approved by the NRC, to account for all sealed sources and devices received and possessed under the license.	<input checked="" type="checkbox"/>	[]
10. Radiation Safety Program - Occupational Dosimetry	We will perform a prospective evaluation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits in 10 CFR Part 20 or we will provide dosimetry that meets the Criteria in the section entitled "Radiation Safety Program - Occupational Dosimetry," in NUREG-1556, Vol. 4, dated October 1998.	[]	[]

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10. Radiation Safety Program - Public Dose	The applicant is not required to submit a response to the public dose section during the licensing phase. However, during NRC inspections, licensees must be able to provide documentation demonstrating, by measurement or calculation, that the total effective dose equivalent to the individual likely to receive the highest dose from the licensed operation does not exceed the annual limit for individual members of the public.	Need Not Be Submitted with Application	
10. Radiation Safety Program - Operating & Emergency Procedures	<p>If the gauge meets one or more of the safety conditions specified in "Discussion," in the section entitled "Radiation Safety Program-Operating Emergency Procedures," in NUREG 1556, Vol. 4, dated August 1998 state the following:</p> <p>Operating and emergency procedures will be developed, implemented, maintained, and distributed, and will meet the Criteria in the section entitled "Radiation Safety Program - Operating and Emergency Procedures," in NUREG-1556, Vol. 4, dated August 1998.</p> <p>For each gauge requested that does not meet one or more of the safety conditions specified in "Discussion," in the section entitled "Radiation Safety Program-Operating Emergency Procedures," in NUREG 1556, Vol. 4, dated August 1998 provide your operating, emergency and lock-out (if applicable) procedures to NRC for review.</p>	<p>[]</p> <p>[] Procedures Attached</p>	<p>[]</p>
10. Radiation Safety Program - Leak Test	<p>Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the Sealed Source and Device Registration Certificate. Leak tests will be performed by an organization authorized by NRC or an Agreement State to provide leak testing services for other licensees or using a leak test kit supplied by an organization authorized by NRC or an Agreement State to provide leak test kits to other licensees and according to the kit supplier's instructions.</p> <p style="text-align: center;">OR</p> <p>We will implement the model leak test program published in Appendix M to NUREG-1556, Vol. 4, dated October 1998.</p>	<p><input checked="" type="checkbox"/></p> <p>[]</p>	<p>[]</p>

APPENDIX B

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10. Radiation Safety Program - Maintenance	<p><u>ROUTINE MAINTENANCE</u> We will implement and maintain procedures for routine maintenance of our fixed gauges according to each manufacturer's or distributor's written recommendations and instructions.</p> <p><u>NON-ROUTINE MAINTENANCE OPERATIONS</u> The gauge manufacturer, distributor or other person authorized by NRC or an Agreement State will perform non-routine operations such as installation, initial radiation survey, repair, and maintenance of components related to the radiological safety of the gauge, gauge relocation, replacement, and disposal of sealed sources, alignment, or removal of a gauge from service.</p>	<input checked="" type="checkbox"/>	<p><input type="checkbox"/></p> <p><input type="checkbox"/> The information listed in Appendix N supporting a request to perform non-routing operations in-house is attached</p>
10. Radiation Safety Program - Transportation	The applicant is <i>not</i> required to submit its response to transportation during the licensing process; this issue will be reviewed during inspection. However, the licensee should develop, implement, and maintain transportation procedures according to NRC and DOT regulations.	Need Not Be Submitted with Application	
10. Radiation Safety Program - Fixed Gauges Used at Temporary Job Sites	<p>This is not applicable to our program. We will not use fixed gauges at temporary job sites.</p> <p style="text-align: center;">OR</p> <p>We will develop, implement, maintain and distribute procedures that meet the Criteria in the section entitled "Radiation Safety Program - Fixed Gauges Used at Temporary Job Sites" in NUREG-1556, Vol. 4, dated October 1998.</p>	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/>	<input type="checkbox"/>
10. Radiation Safety Program - Minimization of Contamination	The applicant is not required to submit a response to minimization of contamination if the applicant's responses meet the criteria for the following sections: Radioactive Material - Sealed Sources and Devices, Facilities and Equipment, Radiation Safety Program - Operating and Emergency Procedures, Radiation Safety Program - Leak Testing, and Waste Management - Gauge Transfer and Disposal.	Need Not Be Submitted with Application	

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
11. Waste Management - Gauge Disposal & Transfer	The applicant is not required to submit a response to waste management during the licensing process. However, the licensee should develop, implement, and maintain gauge transfer and disposal procedures in its radiation protection program.	Need Not Be Submitted with Application	

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

09/21/2015, and to inform you that the initial processing which includes an administrative review has been performed.

47-23053-01 (Renewal)
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

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

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

Your action has been assigned Mail Control Number 588971.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader