

NRC FORM 313
(10-2005)
10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 10/31/2008

Estimated burden per response to comply with this mandatory collection request: 4.4 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 Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@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.

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:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, 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
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

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

NMSB3

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 BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-4005

LL 31315

03037777

03120

(47-31315-01)

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

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

Midland Trail Energy LLC
42 Rensford Star Route
Charleston, 25306 WV

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

42 Rensford Star Route
Charleston, WV 25306

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

David Kimbrell

TELEPHONE NUMBER

(304) 380-0412

RECEIVED
REGION I
JUN -9 AM 11:15

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 (See 10 CFR 170 and Section 170.31)*

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 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

Jeffery D. Bitzer Vice President

SIGNATURE

Jeffery D. Bitzer

DATE

04/26/2008

FOR NRC USE ONLY

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

142484

ITEM 5&6 of NRC FORM 313

Radioisotope	Manufacturer or Distributor Model No.	Quantity	Use As Listed On SSD Certificate	Specify other Uses not Listed on SSD Certificate	
Cesium-137	Sealed Source manufacturer or distributor and model number: Thermo MeasureTech 696894 (5201)	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes [X] Specific description of the gauge use: Gamma gauge use to provide a safe method of making density measurements for coal processing	[X] Not applicable	
	Device manufacture or distributor and model number: Thermo MeasureTech, Model 5201				
Cesium-137	Sealed Source manufacturer or distributor and model number: Thermo MeasureTech 57157C or 696894 (5201A)	Not to exceed either the maximum activity per source or maximum activity per device as specified in Sealed Source and Device Registration Certificate	Yes [X] Specific description of the gauge use: Gamma gauge use to provide a safe method of making density measurements for coal processing	[X] Not applicable	
	Device manufacture or distributor and model number: Thermo MeasureTech Model 5201A				
7. Individual(s) Responsible For Radiation Safety Program and Their Training and Experience	<p>Item 7 of NRC FORM 313</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 and before being named as 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-Radation 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 include in our license.</p>			<p>Yes</p> <p>[X]</p>	<p>Alternative Procedures Not Applicable</p>

7.1 Radiation Safety Officer will be Larry Taylor	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 and before being named as 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-Radation 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 include in our license.	Yes <input checked="" type="checkbox"/>	Alternative Procedures Not Applicable
7.2 Authorized Users	Before using licensed materials,authorized users will have sucessfully completed the traing described in Criteria in the section entitled, " Authorized Users" in NUREG-1556, Vol.4, dated October 1998.	Yes <input checked="" type="checkbox"/>	Alternative Procedures Not Applicable
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	Yes <input checked="" type="checkbox"/>	Alternative Procedures Not Applicable
10 Radiation Safety Program Survey Instruments	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 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.	Yes <input checked="" type="checkbox"/>	Alternative Procedures Not Applicable
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.	Yes <input checked="" type="checkbox"/>	Alternative Procedures Not Applicable

10 Radiation Safety Program Occupational Dosimetry	We will perform a prospective evaluation demonstrating that an inmonitored 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.	Yes [X]	Alternative Procedures Not Applicable
10 Radiation Safety Program Operating & Emergency Procudures	Operating and emercency procudures will be developed,implemented,maintained,and didtributed, and will meet the Criteria in the section entitled "Radiation Safety Program-Operating emergency Procedures,"in NUREG 1556,Vol.4, dated August 1998.	Yes [X]	Alternative Procedures Not Applicable
10 Radiation Safety Program Leak Test	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 test will be performed by an organizatrion 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 ;eak test kits to other licensees and according to the kit supplier's instruction.	Yes [X]	Alternative Procedures Not Applicable
10 Radiation Safety Program Maintenance	<u>ROUTINE MAINTENANCE</u> We will implement and maintain procedures for routine maintenance of our fixed gauges according to each manufactures's or distributor's written recommendations and instruction.	Yes [X]	Alternative Procedures Not Applicable
10 Radiation Safety Program Fixed Gauges Used At Tempory Job Sites.	This is not applicable to our program. We will not use fixed gauges at temporary job sites.	Not Applicable	

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE

Corrected Page 1 - May 9, 2002

NO: TX0634D138B

DATE: April 6, 1999

PAGE 1 OF 4

DEVICE TYPE: Source Housing

MODEL: 5201, 5201A

MANUFACTURER/DISTRIBUTOR: **Thermo MeasureTech**
(formerly TN Technologies)
2555 North IH-35
Round Rock, Texas 78664

SEALED SOURCE MODEL DESIGNATION: Thermo MeasureTech Models:
(1) 696894 (5201)
(2) 57157C or
(3) 696894 (5201A)

ISOTOPE:

- (1) Cs-137
- (2) Cs-137
- (3) Cs-137

MAXIMUM ACTIVITY:

- (1) 200 mCi (7.4 GBq)
- (2) 200 mCi (7.4 GBq)
- (3) 200 mCi (7.4 GBq)

LEAK TEST FREQUENCY: 36 months

PRINCIPAL USE: (D) Gamma Gauges

CUSTOM DEVICE: _____ YES X NO

CUSTOM USER:

TO
DAVE

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE

AMENDED IN ENTIRETY

NO.: TX0634D138B

DATE: April 6, 1999

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DEVICE TYPE: Source Housing

DESCRIPTION: The source housing is constructed of lead-filled, welded steel containing all of the features normally associated with a manually operated device. The source housing is a right circular cylinder welded to a base plate and mounted with two welded steel "L" bars. It is approximately 4 inches in diameter by 6 inches high by 8 inches wide and weighs approximately 41 pounds.

The source is retained in the lead filled housing by a 360 degree crimp cushioned by a curved spring washer. For additional safety, the source tube is closed with a steel spring retainer and sealed from the environment by a 0.032 stainless steel expansion plug.

The shutter is comprised of a lead-filled, all welded stainless steel canister secured by welding a steel guide bolt to a stainless steel plate to prevent it from inadvertent movement by vibration or shock. The shutter has both ON and OFF position indicated on the source head by tags, is secured in the OFF position by lock and the ON position by pin. In the ON position, the beam is emitted into approximately a 13° beam angle, conical in shape. **In the last quarter of 1984, several cosmetic changes were made to this device. When looking at the back of the source holder, the shutter handle is on the right side of the device. A pneumatic control can be placed on the source holder to remotely control the shutter. If this control fails, a manual valve may be turned to release the air pressure and manually close the shutter. A manual standard arm assembly (standard block) can be placed on the left side of the source holder to block a portion of the beam reducing the radiation field to a preselected value. In addition, a manual interlock device can be installed on the source holder that requires a key to the entry of the vessel to be used to allow the shutter to be placed in the ON position after the vessel has been secured.**

Gauges with the "A" suffix in the model number have the source cavity enlarged to take the Model 57157C sealed source. A stainless steel adapter with the same outer dimensions as the Model 57157C can be inserted into the source cavity to allow the Model 696894 to replace the Model 57157C. A hole in the beam port end of the adapter allows full transmission of the gamma rays of the smaller source. The model 5201 gauges are designed to hold only the Model 696894 sealed source.

LABELING: The gauge is tagged with a standard tag, containing the company's name, trade mark, and symbol and the model, isotope, amount of activity, date of measurement, CAUTION RADIOACTIVE MATERIAL, and DO NOT REMOVE. The tag is stainless steel and the radiation symbol is color coded. Additionally, the device contains a separate caution tag which uses both words and symbols to caution users to keep their hands out of the beam area as an added safety feature. The third tag is a shipping bolt tag which serves to caution those individuals not authorized to install and survey gauging devices not to proceed with opening the shutter. For those devices distributed to general licensees, another tag will be added which specifies all details and conditions of general license distribution and the requirements that the user must follow as set out in the Title 25 Texas Administrative Code §289.252(h)(4)(A)(iii). These tags are manufacturing using a second surface printed polyester laminated with pressure sensitive adhesives and tamper proof construction.



REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE

AMENDED IN ENTIRETY

NO.: TX0634D138B

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DEVICE TYPE: Source Housing

DIAGRAM: See attachments 1, 2, and 3.

CONDITIONS OF NORMAL USE: This device is used in making density, level and interface measurements on all types of industrial ships, submarines, dredges, barges, trucks, lowered into the ocean, etc. It is difficult to conceive an environment, short of extremely high temperatures, in which these devices could not be safely used. The typical user would include any manufacturing process including food and, therefore, environments could range all the way from extremely harsh (by way of acids, corrosives and/or toxic vapors and fumes) to laboratory sterile rooms with preconditioned air. They could be used both above and below ground with an expected temperature range of 400°F to -100°F. These devices are routinely used as component parts of other systems. Their care and maintenance is minimal. These devices will withstand extremely harsh environments. As long as the temperatures do not exceed the melting point of lead they can remain in use. If temperatures exceed the melting point of lead, the device will fail in an inoperable mode; that is, the first void volume closed by lead expansion will be the beam port. Short of vaporizing lead, the device should not fail in a condition that constitutes an unacceptable hazard. If the lead is vaporized, the failure will occur at the expansion plug and the lead will continue to run out until temperatures drop and the lead solidifies. In the worst case, the source will remain in the head and one will simply have an external radiation problem. This shutter block has been designed so that it is visually accessible to the user; therefore, one can assess any loss of lead by simply inspecting the beam port and shutter block.

PROTOTYPE TESTING: Prototypes were tested in accordance with American National Standard N538-1979, published as NBS Handbook 129. As a result of those tests, this device was assigned a classification of ANSI 64-454-455-R3.

EXTERNAL RADIATION LEVELS: This device is designed to include sufficient shielding to reduce radiation levels everywhere to less than 5 mR/hr at one foot from any accessible surface at maximum loading. At the maximum loading this device complies with all applicable regulations and will not require additional posting, personnel monitoring or controlling of the area.

QUALITY ASSURANCE AND CONTROL: The construction of the gauge is typical high-quality, welded steel with lead fill. These devices are tested as a function of temperature, drop, vibration and shock with the maximum drop being from a 14 foot elevated platform to an unyielding surface and vibration and shock in excess of 20Gs.



REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE

AMENDED IN ENTIRETY

NO.: TX0634D138B

DATE: April 6, 1999

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DEVICE TYPE: Source Housing

LIMITATIONS AND/OR OTHER CONSIDERATIONS OF USE:

- This device may be distributed to either generally or specifically licensed individuals.
- Because of the construction of the source and the nature of the radioactive material, a three year leak interval has been granted.
- The device is designed and supplied with sufficient information for an individual to unpack and safely mount both the source head and detector following manufacturer's instructions. Initial radiation survey and leak testing should be done by someone specifically authorized to do so.
- All applicable services are provided by the manufacturer including training.

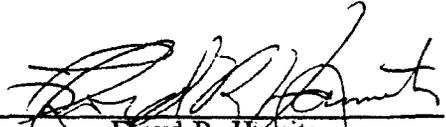
SAFETY ANALYSIS SUMMARY: This device was found to provide a safe method of making density, level and interface measurements in all or corrosive atmospheres, high pressures, and temperature environment up to the melting point of lead. If temperatures exceed the melting point of lead, the device will fail in an inoperable mode; that is, the first void volume closed by lead expansion will be the beam port. Short of vaporizing lead, the device should not fail in a condition that constitutes an unacceptable hazard. If the lead is vaporized, the failure will occur at the expansion plug and the lead will continue to run out until temperatures drop and the lead solidifies. In the worst case, the source will remain in the head and one will simply have an external radiation problem.

REFERENCES: The following supporting documents for TN Technologies, Inc. are hereby incorporated by reference and are made a part of this registry document.

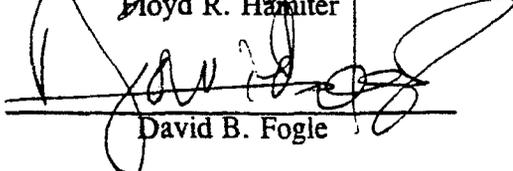
- letter dated January 26, 1983 and all associated drawings, documents and procedures.
- drawing D866760, released September 27, 1984.
- drawing D866761, released May 1, 1987.
- drawing D866763, released September 27, 1984.
- letter dated August 14, 1995, and all associated drawings, documents and procedures.

ISSUING AGENCY: Texas Department of Health
Bureau of Radiation Control

Date: April 6, 1999

Reviewer: 
Floyd R. Hamiter

Date: April 6, 1999

Concurrence: 
David B. Fogle



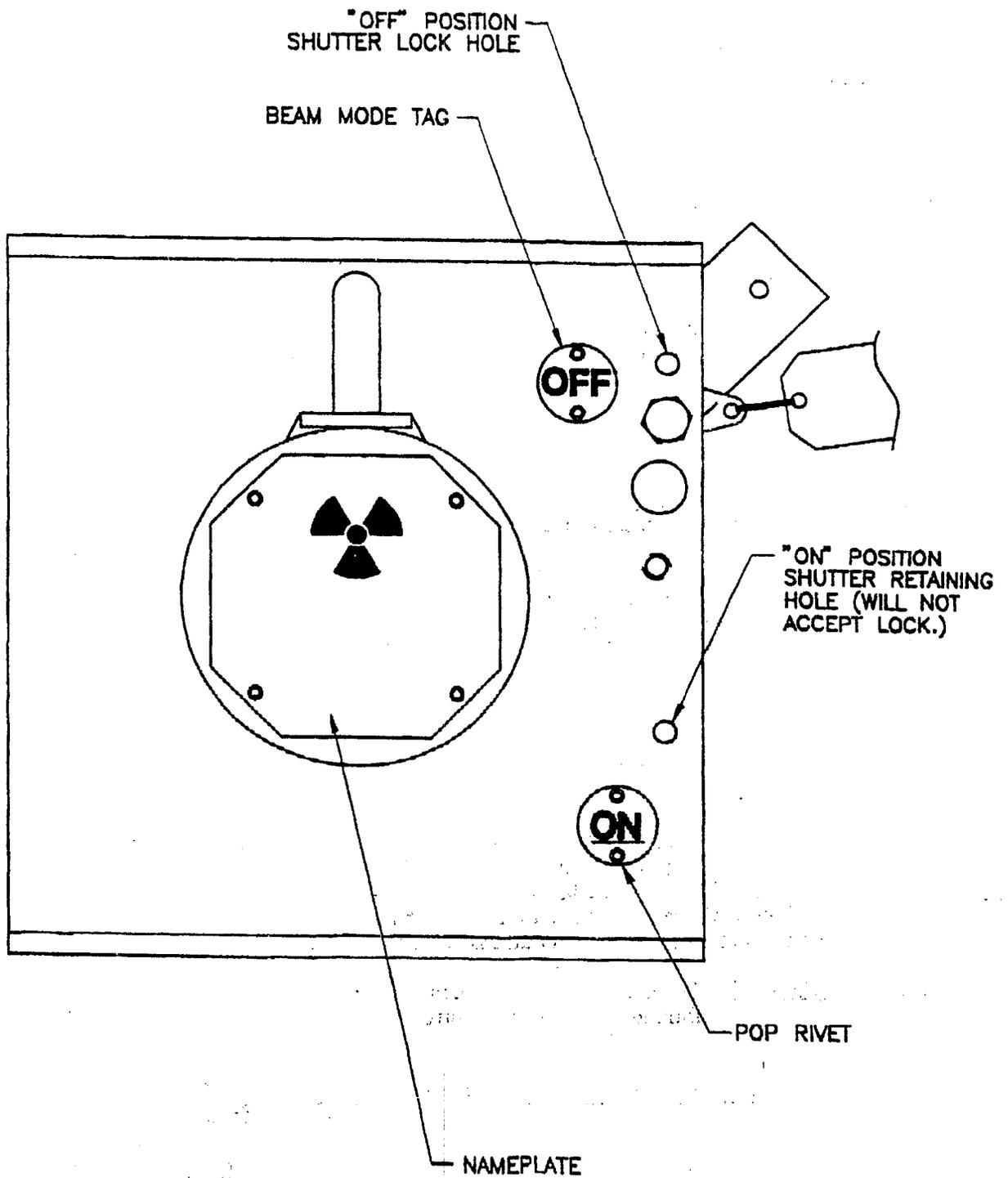
REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE

NO.: TX0634D138B

AMENDED IN ENTIRETY

DATE: January 11, 1996

ATTACHMENT 1



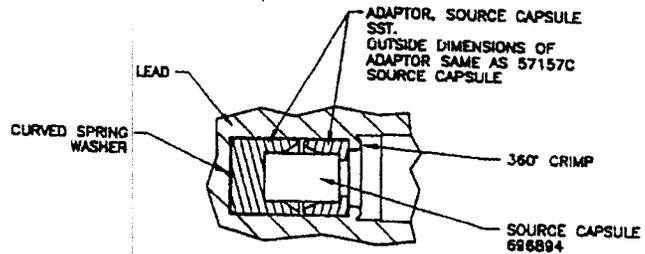
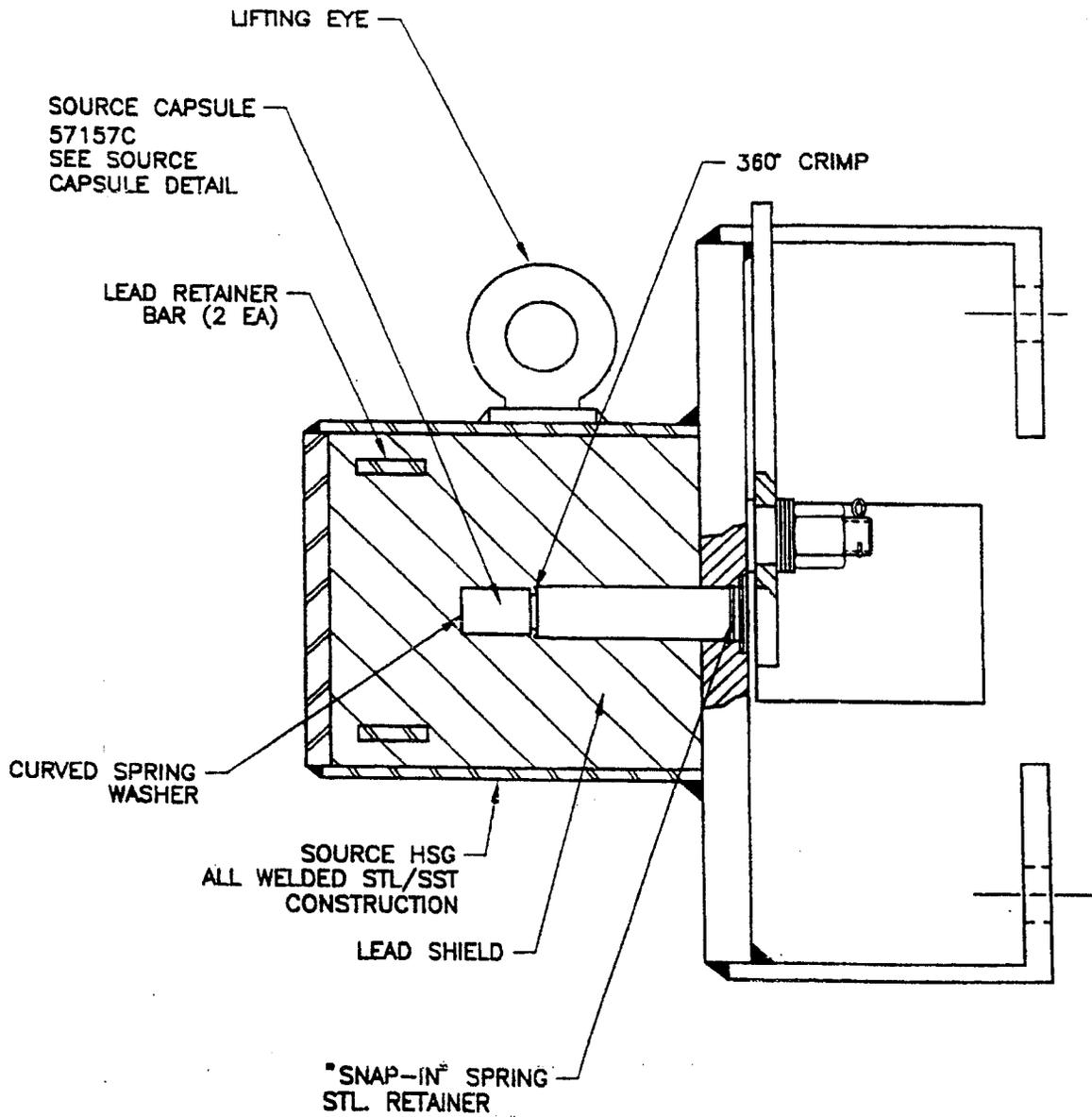
REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE

NO.: TX0634D138B

AMENDED IN ENTIRETY

DATE: January 11, 1996

ATTACHMENT 2



SOURCE CAPSULE DETAIL
INSTALLATION OF 696894 SOURCE CAPSULE



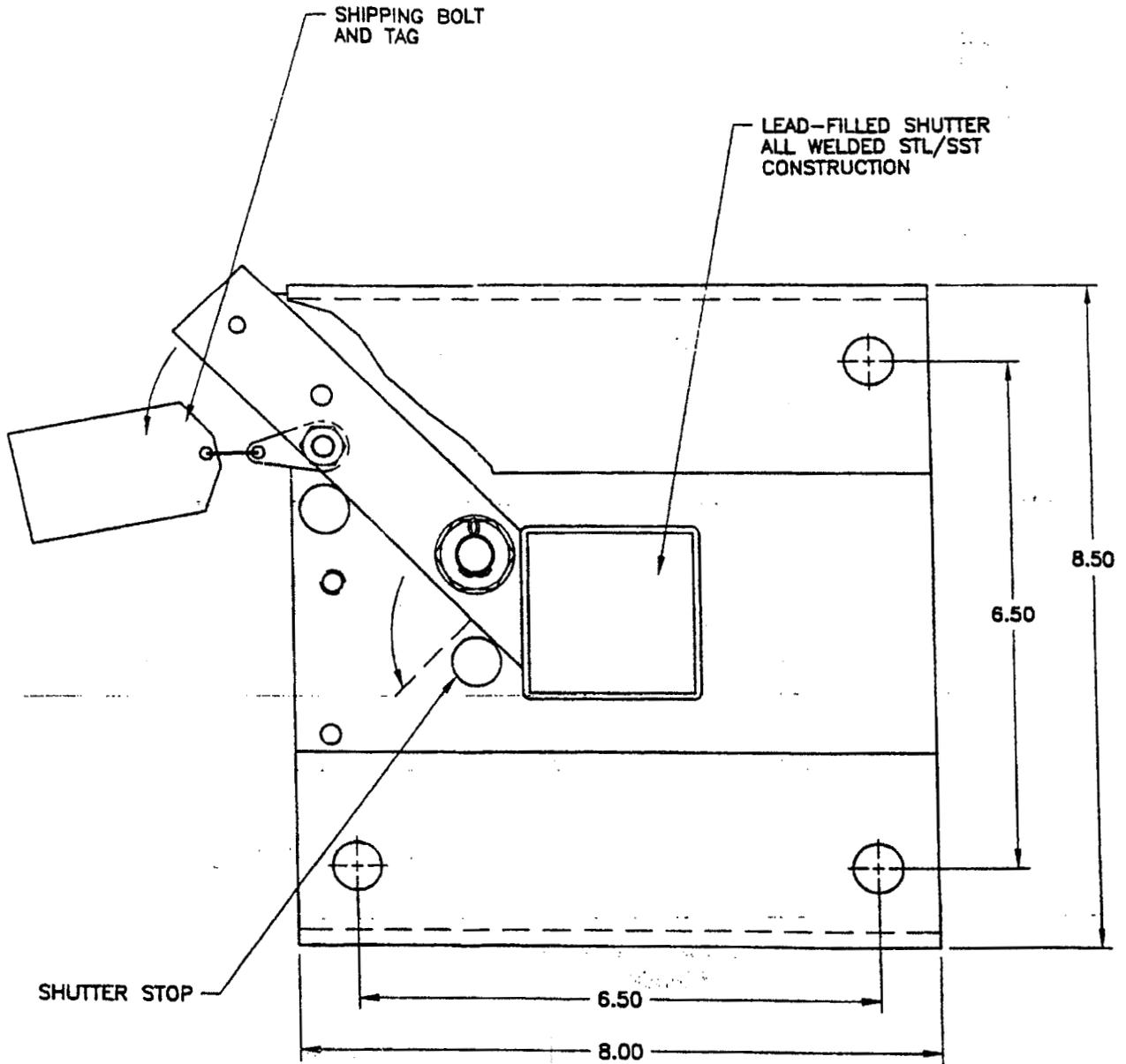
REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF DEVICE

NO.: TX0634D138B

AMENDED IN ENTIRETY

DATE: January 11, 1996

ATTACHMENT 3



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

4/26/2008 ^(RECEIVED) (6/9/2008), and to inform you that the initial processing which includes an administrative review has been performed.

NEW LICENSE APPLICATION (03037777)
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** 142484.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.