

**HUNTINGDON PLANT** 

1200 Susquehanna Avenue Huntingdon, PA 16652 814.641.8000 tel 814.641.8102 fax www.agy.com RECEIVED REGION 1

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**United States Nuclear Regulatory Commission** 

Nuclear Materials Safety Branch 475 Allendale Road King of Prussia, PA. 19406

37-30750-01

03036072

**December 22, 2004** 

Attn: Licensing Section

Dear Sir or Madam,

Due to an impending change in management personnel, AGY Huntingdon, LLC, requests an amendment to United States Nuclear Regulatory Commission (USNRC) Radioactive Materials License Number 37-30750-01. Please replace John Maitland, AGY's current Radiation Safety Officer (RSO), with Allen Smith. Mr. Smith has successfully completed the training as described in NUREG 1556, Volume 4, Appendix G and Appendix N, and is presently listed as an Authorized User in License Condition #18A. AGY wishes to maintain the authorization for non-routine maintenance as described in the application dated July 12, 2002. Included in this request please find the following:

- USNRC Form 313
- Radiation Safety Training Documentation

If there are any questions please contact my office at (814)-641-8001.

Moserongelo

Best Regards,

Joseph A Masciangelo

AGY Huntingdon, LLC

U. S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES:08/31/2002

(8-1999) 10 CFR 30, 32, 33 34, 35, 36, 39 and 40

#### APPLICATION FOR MATERIAL LICENSE

Estimated burden per response to comply with this mandatory information collection request 7.4 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 Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-001, or by Internet e-mail to bjs1@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, 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.

#### 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:

SAM NUNN ATLANTA FEDERAL CENTER
U. S. NUCLEAR REGULATORY COMMISSION, REGION II
61 FORSYTH STREET, S.W., SUITE 23785
ATLANTA, GEORGIA 30303-8931

F 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. 60532-4351

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 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TX 76011-8064

03036072

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.

MATERIAL IN STATES SUBJECT TO U.S.NUCLEAR REGULATORY COMM	ISSION JURISDICTION	IS.		, etc.		
1. THIS IS AN APPLICATION FOR (Check appropriate item)  A. NEW LICENSE  B. AMENDMENT TO LICENSE NUMBER 31-30750-01  C. RENEWAL OF LICENSE NUMBER			2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code) Allen Smith - AGY 1200 Susquehanne Ave. Humting dan, PA 16652			
3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED 1200 Susquehanne Ave. Hunting dan, PA 16652				APPLICATION Allen Smi		
			FIY - 641-8014			
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.						
<ol> <li>RADIOACTIVE MATERIAL.</li> <li>Element and mass number; b. chemical and/or physical form; and c. maiximum amount which will be possessed at any one time.</li> </ol>			3. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.			
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.			LICENSEE 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 OFJUNE 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.						
ALLEN SMITH - CFN OPERATIONS LE		SIGNATI	Ele_ S.	et l	12/22/04	
FOR NRC USE ONLY						
TYPE OF FEE  FEE LOG	CEIVED CHECK N	UMBER	COMMENTS			
APPROVED BY	DATE				6208	

# **USNRC License Application**

# Attachment A (2 pages)

#### Item 1

Application for a new specific license for fixed gauge possession and use.

# <u>Item 2</u>

AGY Huntingdon, LLC 1200 Susquehanna Ave. Huntingdon, PA 16652

#### Item 3

Locations of Use:

Same as Item 2

#### Item 4

Allen Smith

(814)-641-8014

#### Item 5

Cs-137

Sealed Source Manuf: AEA

Device Manuf.:

Berthold Model LB7440F

#### Item 6

The Cs-137 devices are to be used as listed on the SSDR.

Activity will not exceed the maximum activity per source or per device as specified on the SSD Registration Certificate.

The total possession limit of licensed material will not exceed the quantities requiring financial assurance.

#### Item 7

7.1 Mr. Allen Smith: Mr. Smith successfully completed a training course commensurate with the requirements as stated in NUREG 1556, Vol. 4, Appendix G.

7.2 Authorized Users: AGY Huntingdon, LLC requests authorization for the following individuals to perform licensed device installation, alignment, relocation and removal:

Allen Smith has successfully completed a training course commensurate with requirements as stated in NUREG 1556, Vol. 4, Appendix G and N. Documentation of training is included as Attachment C.

#### Item 8

AGY Huntingdon, LLC shall train individuals that could exceed the exposure limits for members of the public as required in 10CFR19.12.

#### Item 9

Licensed material shall be located as per the criteria in NUREG 1556, Vol. 4, Facilities and Equipment. At all times licensed material shall be secured from unauthorized removal or maintained under constant surveillance as described in 10CFR20.1801 and 1802.

Devices and Storage Areas shall be labeled or posted as "Caution Radioactive Materials". The labels or signs shall be conspicuous.

AGY Huntingdon, LLC shall ensure that devices are operated within the temperature and environmental parameters as provided by the manufacturer to ensure device integrity.

#### <u>Item 10</u>

See Attachment B

# **USNRC License Application**

# **Attachment B (2 pages)**

## **Program Reviews**

The AGY Huntingdon, LLC Radiation Safety Officer (RSO) or designee shall review the radiation safety program content at least annually. The results of the review shall be documented and the records maintained as required by regulation.

## **Survey Instruments**

AGY Huntingdon, LLC shall maintain calibrated survey instruments for compliance with 10CFR20.1501 or use the services of a person specifically authorized to perform such services. A licensed vendor shall calibrate survey meters at least annually. The survey instruments shall have ranges applicable to the expected radiation levels associated with the licensed devices.

## **Inventory**

Physical inventories of licensed material shall be performed semi-annually and records maintained as required.

# **Personal Monitoring**

Personal monitoring shall be provided to individuals likely to receive exposures in excess of 10% of the annual limits or at the discretion of the Radiation Safety Officer. Radiation survey results and historical data have verified that exposure to workers during routine use and Authorized Users during device removal, relocation, allignment and installation will not exceed the 500 millirem annual exposure requiring monitoring. Calculations of these estimates are provided as part of Attachment F.

#### **Public Dose**

AGY Huntingdon, LLC shall ensure that exposure to the members of the general public does not exceed the limits as specified in 10CFR20.1301.

## **Operating and Emergency Procedures**

Operating and Emergency Procedures will be implemented and maintained to meet the criteria in the section entitled "Radiation Safety Program-Operating and Emergency Procedures" in NUREG 1556, Vol 4.

In the event that an emergency takes place that could cause damage to licensed material or excessive radiation exposure, AGY Huntingdon, LLC will remove the device from service, restrict access, contact responsible individuals including manufacturer. Notification to the USNRC shall be performed as required in 10CFR 20, 21 and 30. An Emergency Procedure is included as Attachment E.

## **Leak Testing**

Leak testing of sealed sources covered under the license shall be performed at such intervals as specified in the SSD Registration. Analysis shall be provided by individuals licensed to perform that analysis and records maintained as required.

#### **Routine Maintenance**

Routine maintenance shall be performed as per the guidance provided by the device manufacturer. Replacement components shall meet the standards as prescribed by the manufacturer.

#### **Non-Routine Maintenance**

AGY Huntingdon, LLC wishes authorization for Authorized Users to perform the following non-routine maintenance activities:

- Device Relocation or Removal to Storage or Disposal
- Device Installation or Allignment

The non-routine maintenance procedure is included as Attachment F.

# **USNRC License Application**

# Attachment D (2 pages)

#### UNBOLTING AND BOLTING OF NUCLEAR GAUGING DEVICES

#### Purpose

This procedure provides instruction for the removal from service, relocation, allignment and the reinstallation of nuclear gauging devices covered under the AGY Huntingdon, LLCs specific license.

## Scope

This procedure is applicable only for the approved Non-Routine Maintenance activities to include:

- Installation of devices
- Removal or relocation of devices
- Allignment of Devices
- Relocation of Devices

# Prerequisites

Authorized Users performing the removal, allignment, relocation or installation of licensed devices must possess the following training qualifications and demonstrate proficiency in the assigned tasks:

- 1. Successful completion of a Radiation Safety Officer Training course, or equivalent.
- 2. Successful completion of specific training as prescribed in NUREG 1556, Volume 4, Appendix N.
- 3. Prior to removal of a nuclear gauging device, a specified location must be identified to securely store the device. The chosen storage location will meet the following requirements:
  - a. The storage location will be located in an area of the facility with low traffic patterns.
  - b. The access door to the cabinet or room shall be locked and will be labeled with a "Caution, Radioactive Materials" sign with contact phone numbers for the Radiation Safety Officer or designee.

c. Only the Radiation Safety Officer or designee will maintain the key(s).

#### Precautions and Limitations

AGY Huntingdon, LLC personnel will not perform maintenance on the device other than shutter operational checks, leak tests, radiation exposure surveys, removal, relocation, allignment or installation.

Maintenance activities involving mechanical shutter repair, sealed source or shielding removal are NOT AUTHORIZED under this procedure. Contact the RSO or device manufacturer.

Nuclear gauging devices may be removed from service under the following conditions:

- An AGY Huntingdon, LLC Authorized User or an individual specifically licensed to perform this service is present
- Shutter mechanism shall be in the closed position and secured prior to removal from mounting
- Devices shall have a gross weight of not more than 700 lbs
- Devices must have a valid leak test performed prior to removal

Nuclear gauging devices will be removed from storage and re-installed under the following conditions:

- An AGY Huntingdon, LLC Authorized User or an individual specifically licensed to perform this service is present
- Devices are operational and possess a valid leak test
- Shutter mechanism shall be in the closed position and secured prior to installation
- The shutter shall remain closed until a vessel (bushing) is in place.

# Survey Equipment

Surveys performed prior to removal, relocation, allignment and following installation shall be performed with a calibrated survey instrument and the results documented as per the RSO's instructions. Radiation surveys performed following installation shall include the levels in all areas surrounding the device with the shutter in the open position. Survey records shall be retained for inspection as required.

# Attachment E EMERGENCY PROCEDURE

# In The Event Of An Incident Or Suspected Exposure Problem Involving Radioactive Sources

# IMMEDIATELY NOTIFY

Radiation Safety Officer Telephone Numbers

Allen Smith Duty: 641-8014

**Applied Health Physics** 800-332-6648

<u>USNRC</u> 800-432-1156

# Examples of Incidents Requiring RSO

#### Notification

- 1. Suspected overexposure
- 2. Damage to gauge
- 3. Shutter stuck in the open position
- 4. Excessive radiation levels outside of Restricted Area

The RSO shall make notification to the proper regulatory authority as required.

# **Attachment F (1 pages)**

#### DOSIMETRY EVALUATION

According to the AGY Huntingdon, LLC procedure and in accordance with proper ALARA practices for performing non-routine maintenance, all physical handling of licensed devices shall be done with the shutter secured in the closed position.

The current inventory of licensed devices includes the following:

Berthold Model LB7440F Level Gauges containing not more than 50 mCi

AGY Huntingdon, LLC utilized the following references for personnel exposure determinations and the need for monitoring:

- 10CFR20.1502
- Consultant Radiation Survey Data
- AGY Survey Data

Radiation survey results for the Berthold gauges as determined by a consultant identified the following:

5.0 mR/hour at surface

0.4 mR/hour at 30 cm

0.07 mR/hour at 1000 cm

Through previous experiences with licensed vendors, AGY Huntingdon, LLC estimates that the requested non-routine maintenance procedures would not exceed 1.0 hours per task. Historical needs for device non-routine maintenance indicate that no more than 4 moves would be made per year. This would include removal, relocation, allignment and installation. Due to the low radiation levels identified, estimates were not calculated for extremity exposure.

Whole body exposure of 5.0 mR per hour (based upon the surface radiation level with shutter closed) multiplied by 1.0 hour = 5.0 mR/transfer. If the same individual performed this task 10 times (2.5 times the engineer's estimate) per calendar year the total whole body exposure would be 50 millirem. This is well below the requirement for personal monitoring.

Based upon this information AGY Huntingdon, LLC requests that personal monitoring not be required. In the event that the scope of work would change including a potential for exposures in excess of the monitoring requirement, AGY Huntingdon, LLC would arrange for badges to be supplied by a qualified vendor.

This is to acknowledge th	ne receipt of your letter/application dated
12/22/2 includes an administrativ	e review has been performed.
	ファー 30フラの一の/ strative omissions. Your application was assigned to a ease note that the technical review may identify additional additional information.
Please provide to this	office within 30 days of your receipt of this card
	s been forwarded to our License Fee & Accounts Receivable you separately if there is a fee issue involved.
Your action has been ass When calling to inquire a You may call us on (610	bout this action, please refer to this control number. 337-5398, or 337-5260.
NRC FORM 532 (RI) (6-96)	Sincerely, Licensing Assistance Team Leader

:

	: (FOR LFMS USE) : INFORMATION FROM LTS
BETWEEN:	:
License Fee Management Branch, ARM and Regional Licensing Sections	. : Program Code: 03120 : Status Code: 0 : Fee Category: 3P : Exp. Date: 20120731
	: Fee Comments: : Decom Fin Assur Reqd: N
LICENSE FEE TRANSMITTAL	
A. REGION <u>T</u>	
1. APPLICATION ATTACHED  Applicant/Licensee: AGY- HUNTING Received Date: 20041227 Docket No: 3036072 Control No.: 136208 License No.: 37-30750-01 Action Type: Amendment	DON, LLC
2. FEE ATTACHED Amount: Check No.:	
3. COMMENTS	
Signed Date	M.a. Perbins
B. LICENSE FEE MANAGEMENT BRANCH (Che	eck when milestone 03 is entered //)
1. Fee Category and Amount:	
2. Correct Fee Paid. Application material Amendment Renewal License	ay be processed for:
3. OTHER	
Signed	a a

Date