

Georgia Department of Natural Resources

4244 International Parkway, Suite 114, Atlanta, Georgia 30354

Lorice C. Barrett, Commissioner
David M. Word, Assistant Director
Environmental Protection Division
404/382-2676

RADIOACTIVE MATERIALS PROGRAM GEORGIA RADIOACTIVE MATERIALS LICENSE

Pursuant to the Georgia Radiation Control Act O.C.G.A. 31-13 (T.B. 947) 1990 and the Georgia Department of Natural Resources Rules and Regulations, designated Chapter 391-3-17, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess, and use the radioactive material(s) designated below; and to use such radioactive materials for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations of the Georgia Department of Natural Resources and orders issued by the Department, now or hereafter in effect, and to any condition specified below.

Page 1 of 9 Pages
License Number GA 896-1
Amendment Number .41

License (1. Name and 2. Address)

Applied Technical Services, Inc.
1190 Atlanta Industrial Drive
Marietta, Georgia 30066

3. In accordance with renewal dated August 18, 2003, License Number GA 896-1 is amended in its entirety to read as follows:

4. Expiration Date: October 31, 2008

5. Telephone Number: 770 423-1400
Facsimile Number: 770 514-3299

6. RADIOACTIVE MATERIAL (ELEMENT AND MASS NUMBER)	7. CHEMICAL AND/OR PHYSICAL FORM	8. MAXIMUM QUANTITY LICENSEE MAY POSSESS AT ANY ONE TIME
A. Iridium 192	A. Sealed Source (Amersham-Gamma Industries Model A-2-A)	A. No single source to exceed 100 Curies
B. Iridium 192	B. Sealed Source (Amersham Tech/Ops Model A58101-8)	B. No single source to exceed 200 Curies
C. Iridium 192	C. Sealed Source (Amersham Gamma Industries Model GP)	C. No single source to exceed 100 Curies
D. Iridium 192	D. Sealed Source (Amersham-Tech/Ops Model A424-9)	D. No single source to exceed 100 Curies
E. Cobalt 60	E. Sealed Source (Amersham-Tech/Ops Model A424-14)	E. No single source to exceed 100 Curies
F. Cobalt 60	F. Sealed Source (Amersham-Gamma Industries A-8-A)	F. No single source to exceed 100 Curies

Georgia Department of Natural Resources**Radioactive Materials License****Supplementary Sheet**Page 2 of 9 Pages
License Number GA 896-1
Amendment Number .41

6. RADIOACTIVE MATERIAL (ELEMENT AND MASS NUMBER)	7. CHEMICAL AND/OR PHYSICAL FORM	8. MAXIMUM QUANTITY LICENSEE MAY POSSESS AT ANY ONE TIME
G. Iridium 192	G. Sealed Source (SPEC Model T-5)	G. No single source to exceed 100 Curies
H. Iridium 192	H. Sealed Source (SPEC Models G-1, G-1F, or G-3F)	H. No single source to exceed 200 Curies
I. Iridium 192	I. Sealed Source (SPEC MODELS G-1F or G-3F)	I. No single source to exceed 100 Curies
J. Iridium 192	J. Sealed Source (INC Model 7)	J. No single source to exceed 100 Curies
K. Iridium 192	K. Sealed Source (INC Model 32 or 33)	K. No single source to exceed 100 Curies
L. Iridium 192	L. Sealed Source (Amersham Model 899-11)	L. No single source to exceed 100 Curies
M. Cesium 137	M. Sealed Source (Amersham-Tech/Ops Model 77302)	M. No single source to exceed 165 millicuries
N. Iridium 192	N. Sealed Source (CIS-US, Inc. Model 702)	N. No single source to exceed 100 millicuries
O. Iridium 192	O. Sealed Source (AEA Technology Model A424-9)	O. No single source to exceed 150 Curies
P. Cadmium 109	P. Sealed Source Models which are registered in accordance with Rule 391-3-17.02(11)(I) or equivalent regulations of the US NRC or another Agreement State	P. No single source to exceed 10 millicuries
Q. Iron 55	Q. Sealed Source Models which are registered in accordance with Rule 391-3-17.02(11)(I) or equivalent regulations of the US NRC or another Agreement State	Q. No single source to exceed 15 millicuries
R. Iridium 192	R. Sealed Source (AEA Technology Model A424-9)	R. No single source to exceed 130 Curies

Georgia Department of Natural Resources
Radioactive Materials License
Supplementary Sheet

Page 3 of 9 Pages
License Number GA 896-1
Amendment Number .41

9. AUTHORIZED USE

- A. To be used in an Amersham-Gamma Industries Model Century S exposure device (with appropriately fitted controls and long protector cap on lock box) for industrial radiography and in Amersham-Gamma Industries Model C-10 source changer for storage and replacement of sources.
- B. To be used in an Amersham-Tech/Ops Inc. Model 616 exposure device for industrial radiography.
- C. To be used in an Amersham-Gamma Industries Model Pipeliner 1 exposure device for industrial radiography.
- D. To be used in an Amersham-Tech/Ops Model 660, 660A, or 660B exposure device for industrial radiography and in an Amersham-Tech/Ops Model 650 source changer for storage and replacement of sources.
- E. To be used in an Amersham-Tech/Ops Model 680, 680A, or 680B exposure device for industrial radiography and in Amersham-Tech/Ops Model 488 or 771 source changer for storage and replacement of sources.
- F. To be used in an Amersham-Gamma Industries Model 100A exposure device for industrial radiography and in an Amersham-Gamma Industries model C-8 source changer for storage and replacement of sources.
- G. To be used in an Amersham-Tech/Ops, Inc. Model 660 exposure device for industrial radiography and in a Source Production and Equipment Company Model C-1 source exchanger for storage and replacement of sources.
- H. To be used in a Source Production and Equipment Company Model 2T exposure device for industrial radiography and in a Source Production and Equipment Company Model C-1 source changer for storage and replacement of sources.
- I. To be used in an Amersham-Gamma Industries Model Century S exposure device for industrial radiography and in a Source Production and Equipment Company Model C-1 storage and replacement of sources.
- J. To be used in an Amersham-Tech/Ops Model 660 exposure device for industrial radiography and in an Industrial Nuclear Model IR-50 source exchanger for storage and replacement of sources.
- K. To be used in an Industrial Nuclear Model IR-100 exposure device for industrial radiography and in an Industrial Nuclear Model IR-50 source exchanger for storage and replacement of sources.

Georgia Department of Natural Resources

Radioactive Materials License

Supplementary Sheet

Page 4 of 9 Pages
License Number GA 896-1
Amendment Number 41

AUTHORIZED USE (continued)

- L. To be used in an Amersham-Gamma Industries model Century S exposure device for industrial radiography and in Amersham Models C-10, U-110, or 500-SU source exchanger for storage and replacement of sources.
- M. For use in an Amersham Tech/Ops Model 773 survey meter calibration unit for calibration of survey instruments.
- N. For use in an Amersham Model 660A, 660B, exposure device for industrial radiography and in an IR-50 source changer for exchange and storage.
- O. To be used in an AEA Technology Model 880 Delta exposure device for industrial radiography and in an Industrial Nuclear Model IR-50 source exchanger for storage and replacement of sources.
- P., Q. For use in a Niton XL-II X-ray fluorescence device for material chemical analysis.
- R. To be used in an AEA Technology Model 880 Sigma exposure device for industrial radiography and in an Industrial Nuclear Model 650L source exchanger for storage and replacement of sources.

CONDITIONS

- 10. Radioactive material shall be stored at 1190 Atlanta Industrial Drive, Building II, Marietta, Georgia, 635 Laney Walker Blvd. Ext., Augusta, Georgia 30901 or at 5578C Export Blvd, Garden City, Georgia 31408. Radioactive material may be used only at temporary job sites of the licensee anywhere in the State of Georgia. This condition does not prohibit use in other Agreement States and States under the jurisdiction of the U.S. Nuclear Regulatory Commission under reciprocity procedures which may be established by an Agreement State or the U.S. Nuclear Regulatory Commission.
- 11. The licensee shall comply with the provisions of Georgia Department of Natural Resources Rule 391-3-17-.03, "Standards for Protection Against Radiation, Amended." Rule 391-3-17-.04, "Special Radiation Safety Requirements for Industrial Radiographic Operations, Amended", Rule 391-3-17-.06, "Transportation of Radioactive Material, Amended", and Rule 391-3-17-.07, "Notices, Instructions and Reports to Workers: Inspections, Amended."

Georgia Department of Natural Resources
Radioactive Materials License
Supplementary Sheet

Page 5 of 9 Pages
License Number GA 896-1
Amendment Number .41

Conditions (continued)

12. In accordance with DNR Board Policy adopted May 28, 2003 the fees associated with this license, fee category C.3. are:

Application fee	\$3000.00	Annual fee	\$4160.00
Amendment fee	\$490.00	Non-routine Inspection fee	\$2500.00

Checks for the fees should be made payable to the Department of Natural Resources, Radioactive Materials Program, and mailed to the following address:

Radioactive Materials Fees
P.O. Box 101161
Atlanta, GA 30392

Mail license applications and amendment requests to the following address:

Radioactive Materials Program
4244 International Parkway, Suite 114
Atlanta, GA 30354

All license applications, amendments and fee payments should be mailed the same day.

Annual fees are billed by the Department at the beginning of each fiscal year.

13. The Radiation Safety Officer in this program shall be Gene Mock.
14. All records or copies of records pertaining to Radioactive Material License GA. 896-1 shall be maintained by the Radiation Safety Office at the address below:

Applied Technical Services, Inc.
1190 Atlanta Industrial Drive,
Atlanta, Georgia 30066.

15. Except for maintaining labeling as required by 391-3-17-.03, the licensee shall obtain authorization from the Department before making any changes in the sealed source, device, or source-device combination that would alter the description or specifications as indicated in the Sealed Source Registry issued either by the Department, an Agreement State or, the Nuclear Regulatory Commission.
16. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material with a half-life greater than 120 days to quantities less than those specified in Rule 391-3-17.02(8)(g)4. Exceeding quantities in .02(8)(g)4. requires the submittal of a financial assurance mechanism or a decommissioning funding plan.

Georgia Department of Natural Resources
Radioactive Materials License
Supplementary Sheet

Page 6 of 9 Pages
License Number GA 896-1
Amendment Number .41

Conditions (continued)

17. A. The licensee shall perform required tests for leakage or contamination at intervals not to exceed six (6) months in accordance with Rule 391-3-17-.04(9)(c).
- B. Sealed sources authorized for use other than radiography shall be tested in accordance with Rule 391-3-17-.03(6).
- C. The Radiation Safety Officer or other radiographic personnel designated by him are authorized to collect wipe test samples of sealed sources possessed under this license using leak test kits furnished by persons authorized by a license to perform that service.

Conditions 18 - 25 apply only to items listed in 6.A. through 6.O. and 6.R.

18. A. Gene Mock, Scott Powell, R Leimenstoll, Steve Hiemstra, Jason Marrs, Kenneth Vaughn, Kevin Harris, Mark Bottoms, Don Weeks, Jim Hills, Kevin Floyd, Harold Bailey, Pat Burns, Jim Graviano Jr., Chris Carter, Tom Fitzgerald, Kelly Fortney, Gordon Livermore, Alan Poling, Ron Johnston, Chris Gonzalez, Robert Stafford, Chris Vorwald, Sean Bruns, Mike Dally, Robert Stafford, Anthony D. Wilhelm or Mark Terry are the only persons authorized by this license to act as radiographers as defined in Rule 391-3-17-.04(3)(y).
- B. Only those persons who have satisfactorily completed Applied Technical Services, Inc.'s training program as described in procedure manual received with letter dated January 8, 2003 and have met the requirements outlined in Rule 391-3-17-.04(16)(c) shall be authorized by this license to act as radiographers and radiographer trainees as defined in 391-3-17-.04(3)(aa). The licensee shall maintain records of individuals who have completed the training program.
19. Pursuant to Rule 391-3-17-.02, "Licensing of Radioactive Material," the licensee is authorized to possess, use, transfer, and import up to 999 kilograms of depleted uranium contained as shielding material in the radiography exposure devices and source changers authorized by this license.
20. Sealed sources containing radioactive material shall not be opened by the licensee.
21. The Radiation Safety Officer or other radiographic personnel designated by him are authorized to change sealed sources described in Items 6, 7, and 8 of this license using instructions of the distributor of the source changer.
22. The licensee is authorized to receive, possess, and use sealed sources of iridium-192 or cobalt-60 where the radioactivity exceeds the maximum amount of radioactivity specified in Item 8 of this license provided:
- A. Such possession does not exceed the quantity per source specified in Item 8 by more than 20% for iridium-192 or 10% for cobalt-60;

Georgia Department of Natural Resources
Radioactive Materials License
Supplementary Sheet

Page 7 of 9 Pages
License Number GA 896-1
Amendment Number .41

Condition 22 (continued)

- B. Records of the licensee show that no more than the maximum amount of radioactivity per source specified in Item 8 of the license was ordered from the supplier or transferor of the radioactive material; and
 - C. The levels of radiation for radiographic exposure devices and storage containers do not exceed those specified in Rule 391-3-17-.04(6).
23. Radiographer certification identification (I. D.) Cards which have been issued by the Department, an Agreement State, the Nuclear Regulatory Commission, ASNT, or any other certifying entity shall be available at each job site. A copy of the I. D. Card shall be maintained on file for Department inspection.
24. The licensee shall inform the Department within three (3) days of work to be performed at temporary job sites within the State of Georgia. If the licensee was not given three (3) days notice for a particular job site the licensee shall provide notification to the Department prior to starting work at the site. The information required in the notification is: the location of the job site; the employing company; a point of contact for the employing company; the dates of the job; and the starting and ending times on the job site.
25. The shielding for the shooting cell located at 190 Atlanta Industrial Drive, Marietta, Georgia 30066 has been approved for a maximum of 95 Curies of Iridium 192 in accordance with Department approval dated 12/11/85.

Conditions 26- 32 apply only to items listed in 6.P. and 6.Q.

26. Licensed material shall be used by, or used under the supervision of, and in the physical presence of individuals who have successfully completed the manufacturer's training program, have received copies of the licensee's operating and emergency procedures, and have been designated by the Radiation Safety Officer. Records/Certificates of training shall be maintained for Department inspection.
27. Each portable gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport, storage, or when not under the direct surveillance of an authorized user.
28. Maintenance or repair of portable devices involving removal of sealed sources from the devices or removal or dismantling of shielding may be performed only by the device manufacturer, or by persons specifically authorized by the Department, Agreement States, or the U.S. Nuclear Regulatory Commission to perform such services.
29. Sealed sources containing radioactive material shall not be opened or removed from their respective source holders by the licensee.

Georgia Department of Natural Resources
Radioactive Materials License
Supplementary Sheet

Page 8 of 9 Pages
License Number GA 896-1
Amendment Number .41

Conditions (continued)

30. The licensee shall conduct a physical inventory every 6 months to account for all licensed material received and possessed under this license. The records of inventories shall be maintained for inspection by the Department and shall include the quantities and kinds of radioactive material, the manufacturer, model and serial number, location of sealed sources, and the date and name of the individual performing the inventory.
31. The licensee shall maintain a current utilization log which shall be kept available for inspection by the Department, for three years from the date of the recorded event, showing for each sealed source the following information:
 - A. A unique identification, such as a serial number, for each portable gauge in which a sealed source is located;
 - B. The identity of the individual to whom assigned;
 - C. Locations where used and dates of use; and
 - D. The date(s) each source is removed from storage and returned to storage.
32. The licensee shall notify the Radioactive Materials Program, Georgia Department of Natural Resources, of each operation conducted under the license at a location other than that specified in Item 2 above when such operation continues for more than 60 days. The licensee shall also notify this office upon cessation of such operation.
33. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with statements, representations, and procedures contained in the documents, including any enclosures listed below:
 - A. Application dated October 12, 1998 and signed by Gene Mock, Radiation Safety Officer; and
 - B. Letter dated June 22, 2000, and signed by Jim J. Hills, Manager, NDT, and;
 - C. Letter dated January 23, 2001, and signed by Gene Mock, Radiation Safety Officer, and;
 - D. Letter dated February 12, 2001, and signed by Gene Mock, Radiation Safety Officer, and;
 - E. Letter dated May 16, 2001, and signed by Gene Mock, Radiation Safety Officer, and;
 - F. Letter dated October 3, 2001, and signed by Gene Mock, Radiation Safety Officer, and;
 - G. Letter dated May 6, 2002 and signed by Gene Mock, Radiation Safety Officer, and;

Georgia Department of Natural Resources
Radioactive Materials License
Supplementary Sheet

Page 9 of 9 Pages
License Number GA 896-1
Amendment Number 41

Condition 33 (continued)

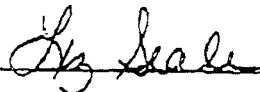
- H. Letter dated May 20, 2002 and signed by Gene Mock, Radiation Safety Officer, and;
- I. Letter dated January 8, 2003 and signed by Scott Powell, Assistant Radiation Safety Officer, and;
- J. Letter dated September 2, 2003 and signed by Jim J. Hills, President, and;
- K. Application with attachments dated August 18, 2003 and signed by Gene Mock, Radiation Safety Officer.

The Georgia Department of Natural Resources' regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the Regulations.

FOR THE DEPARTMENT OF NATURAL RESOURCES

Date: September 22, 2003

BY



Liz Seale