REPORT OF PROPOSED ACTIVITIES IN NON-AGREEMENT STATES, AREAS OF EXCLUSIVE FEDERAL JURISDICTION, OR OFFSHORE WATERS (Please read the instructions before completing this form)  1. NAME OF LICENSEE (Person or lirm proposing to conduct the activities described below)  K. S. Ware and Associates, LLC  3. ADDRESS OF LICENSEE (Mailing address or other location where licensee may be located)  54 Lindsley Are  Nashv: Ile, TN 37210				APPROVED BY OMB: NO. 3150-0013 EXPIRES: 07/31/2002 Estimated burden per response to comply with this mandatory collection request: 15 minutes. This notification is required so that NRC may schedule inspection of the activities to ensure that they are conducted in accordance with requirements for protection of the public health and safety. Send comments regarding burden estimate to the Records Management Branch (1-8 E6), U.S. Nuclear Regulatory Commission, Washington, DC 2055-0001, or by internet e-mail to bjst@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0013), Office of Management and Budget, Washington, DC 20503. It 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.  2. TYPE OF REPORT  INITIAL REVISION CLARIFICATION  4. LICENSEE CONTACT AND TITLE  Charles Ervin RSO			
// d3/// 116/ /// 3/ 12/0				TELEPHONE NU finciude Area Co 15 - 743 -			FACSIMILE NUMBER (Include Aree Code)
7. ACTIVITIES TO BE CONDUCT	ED UNDE	R THE GE	NERALI	LICENSE GIV	EN IN 10	CFR 150	0.20
7. ACTIVITIES TO BE CONDUCTED UNDER THE GENERAL LICENSE GIVEN IN 10 CFR 150.20  WELL LOGGING LEAK TESTING AND/OR CALIBRATIONS TELETHERAPY/IRRADIATOR SERVICE  PORTABLE GAUGES OTHER (Specify) ⇒							
RADIOGRAPHY  REGISTERED AS USER OF PACKAGING (CERTIFICATES OF COMPLIANCE NUMBERS)							
8. CLIENT NAME, ADDRESS, CITY/COUNTY, STATE, ZIP CODE		9. ACTUAL P	HYSICAL A	ADDRESS OF WO	ORK LOCATIO	ON	
Mactec Constructors		(Stroot an	d Number o	or other location.	Give as comp	lete an add	dress or directions as possible.)
				and IHP			
97 B Midway Lane		1	_	lge Nati		460	ratory
Oak Ridge, TN 37830		0 4	K R	dge, TN	•		
<b>V V V V V</b>		10. CLIENT	TELEPHON	NE NUMBER	11. W	ORKLOCA	ATION TELEPHONE NUMBER
		865	Aree Code) - 483	-1280		ciud <b>e</b> Ar <b>ee</b> 365 ~	574 - 0996
12. DATES SCHEDULED	13. NUA WORK	MBER OF CDAYS	,	14. ADD	15. DELET	Έ	16. LOCATION REFERENCE NUMBER
FROM TO	157	ŀ					NUMBER TO BE ASSIGNED BY NRC
Jan. 21, 2003 August 29, 2003	see at	tachment	•	1		l	
	#5	<u></u>	•				
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finclude description of type and quantity of radioactive material, sealed a Cesium 137 NO Single Source	HEET(S) NSTALLED, ources, or d	TO INCLUI SERVICED, O evices to be u	R TESTED			INED IN	
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II (Include description of type and quantity of radioactive material, seeled s  Ces: No single Source	HEET(S) NSTALLED, ources, or d	TO INCLUI SERVICED, OI evices to be u XCEEQ	R TESTED	n: Hicurie	5 19 mil	likur	ITEMS 9-16 ABOVE.
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finched description of type and quantity of radioactive material, seeled se  (es: M 137 NO single succe  Americium 241 Beryllium No single  18. Agreement state specific License which authorizes the una ACTIVITIES WHICH ARE THE SAME EXCEPT FOR LOCATION OF USEN, ABOVE (Four copies of the specific license must accompany the	HEET(S) NSTALLED, OUTCOS, OF d  + O C  DERSIGNED AS SPECIFIE Initial NRC	TO INCLUI SERVICED, O evices to be a XCEED. TO CONDUCT DINITEM 9 Form 241.)	R TESTEO	n: Ilicurie Keed L Cense number 3-19218	5 19 mil D07.	likur	ITEMS 9-16 ABOVE.
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II (Include description of type and quantity of radioactive material, sealed se (Cesium 137 No single Susce Americium 241: Beryllium No single  18. AGREEMENT STATE SPECIFIC LICENSE WHICH AUTHORIZES THE UNI ACTIVITIES WHICH ARE THE SAME, EXCEPT FOR LOCATION OF USES, ABOVE (Four copies of the specific license must accompany the	HEET(S) NSTALLED, OUTCOS, OF d  + O C  DERSIGNED AS SPECIFIE Initial NRC	TO INCLUI SERVICED, O evices to be a XCEED. TO CONDUCT DINITEM 9 Form 241.)	R TESTEO	n: Ilicurie Keed L Cense number 3-19218	5 19 mil D07.	Ilicut State	ITEMS 9-16 ABOVE.
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finched description of type and quantity of radioactive material, seeled at Cesium 137 NO single source.  Americium 241 Beryllium No single for single source.  18. Agrictives which are the same except for location of user, activities which are the same except for location of user, above (Four copies of the specific license must accompany the in, the undersigned, hereby certify that:	HEET(S) NSTALLED, OUTCOS, OF d  + O C  DERSIGNED AS SPECIFIE Initial NRC	TO INCLUI SERVICED, O evices to be a XCEED. TO CONDUCT DINITEM 9 Form 241.)	R TESTEO	n: Ilicurie Keed L Cense number 3-19218	5 19 mil D07.	Ilicut State	ITEMS 9-16 ABOVE.
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finclude description of type and quantity of radioactive material, seeled at Cesium 137 NO Single Source  Americium 241: Beryllium was single Agreement state specific lucense which authorizes the unit activities which are life same, except for Location of USE, above (Four copies of the specific license must accompany the information in this report is true and complete.  In the undersigned, hereby certify that:  a. All information in this report is true and complete.  In they have read and understand the provision of the general	HEET(S) NSTALLED, ources, or d + C  NC SC DERSIGNED ENSIGNED Initial NRC ON (MUS	TO INCLUI SERVICED, OI evices to be u XCEED.  TO CONDUCT DINITIEM 9. FORM 241.)  ST BE COM-	R TESTED Sed.)  G W LICE R MPLETEL  reprinted	ntiliconte  CERSE NUMBER  3-19218  D BY APPLIC	5 19 m: DO7.	STATE TN	ITEMS 9-16 ABOVE.  ICS EXPIRATION DATE  April 30, 2007  and I understand that I am
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finclude description of type and quantity of radioactive material, seeled a Cesium 137 No single Source  Americium 241 Beryllium No single  18. AGREEMENT STATE SPECIFIC LICENSE WHICH AUTHORIZES THE UNIX ABOVE (Four copies of the specific license must accompany the ABOVE (Four copies of the specific license must accompany the 19. CERTIFICATI  1, THE UNDERSIGNED, HEREBY CERTIFY THAT:  a. All information in this report is true and complete.  b. I have read and understand the provision of the general required to comply with these provisions as to all byptor offshore waters under the general license for which this c. I understand that activities, including storage, conducted.	HEET(S)  NSTALLED, OUTCES, or do  OU	TO INCLUIT TO INCLUIT SERVICED, OI EVICES to be u XCEEO  SIZE † TO CONDUCT DINITEM 9. FORM 241,) ST BE COM  CFR 150.20 Cet, or specialled with the greement SI	reprinted al nuclear U.S. Nucleates und	CENSE NUMBER  - 19318  D BY APPLIC  d on the instruir r material whice clear Regulator ler general lice	5 DOT. ANT) ctions of the	STATE TN is form; and use iton. 150.20 a	ITEMS 9-16 ABOVE.  ICS  EXPIRATION DATE  AGC: 1 30, 2007  and I understand that I am In non-Agreement States or  re limited to a total of 180 days
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finclude description of type and quantity of radioactive material, sealed at Cesium 137 NO Single Source.  Americium 241: Beryllium was single.  18. AGREEMENT STATE SPECIFIC LICENSE WHICH AUTHORIZES THE UNIT ACTIVITIES WHICH ARE THE SAME, EXCEPT FOR LOCATION OF USE. A ABOVE (Four copies of the specific license must accompany the interpretation of the specific license for which this business of the specific license for which this continued to comply with these provisions as to all bypromotishore waters under the general license for which this continued that activities, including storage, conducted in calendar year. With the exception of work conducted in the specific license of the specific license for which this	HEET(S)  NSTALLED, OUTCES, ord  AC SC  DERSIGNED  AS SPECIFIC  Initial NRC  ON (MUS  Ilicense 10  duct, source report is fill d in non-A in off-short	TO INCLUI TO INCLUI SERVICED, OI evices to be u XCECO TO CONDUC TO CONDUC FORM 241.) TO ECONO CFR 150.20 Ce, or specialled with the greement Si e waters, wi	reprinted al nuclear U.S. Nuclates und hich is au	CERSE NUMBER  - 19219  D BY APPLIC  d on the instruct material which clear Regulator ler general lice thorized for an	5 DO7. ANT) ctions of the high possess y Commiss unlimited in the commissions of the commission of the highest possess of the commission o	STATE TN is form; and use clon.	ITEMS 9-16 ABOVE.  ICS EXPIRATION DATE AGGET 30, 2007  and I understand that I am In non-Agreement States or ire limited to a total of 180 days time in the calendar year.
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finclude description of type and quantity of radioactive material, seeled a Cesium 137 No Single Source.  Americium 341 Beryllium Do Single Source.  18. AGREEMENT STATE SPECIFIC LICENSE WHICH AUTHORIZES THE UNIT ACTIVITIES WHICH ARE THE SAME, EXCEPT FOR LOCATION OF USE, A ABOVE (Four copies of the specific license must accompany the interest of the specific license specific license must accompany the interest of the specific license specific license which are the specific license for which this is a limit of the specific license for which this confidence waters under the general license for which this confidence waters under the general license for which this confidence waters under the general license for which this confidence waters under the general license for which this confidence waters under the exception of work conducted in calendar year. With the exception of work conducted in understand that activities, including storage, conducted in calendar year. With the exception of work conducted in understand that I may be inspected by NRC at the above non-Agreement States or offshore waters.	HEET(S)  NSTALLED, OUTCES, ord  AC SC  DERSIGNED  AS SPECIFIC  Illicense 10  duct, sour  report is fill d in non-A  n off-shore  re listed wo	TO INCLUI TO INCLUI SERVICED.  CERCES to be u XCECO  TO CONDUCT DINITIEM 9 Form 241.)  TO BE COM  CFR 150.20 Ce, or specialled with the greement Si e waters, whork site loca	reprinted al nuclear U.S. Nucleates und hich is auditions and	n: Illeurie  Ceel L  Ceel L  Cense NUMBER  - 19216  D BY APPLIC  d on the instruir material which clear Regulator ler general lice thorized for an d at the License	OT.  ANT)  ctions of the possess y Commiss are 10 CFR untilmitted gee home off	is form; and use sloon. 150.20 a period of fice address	ITEMS 9-16 ABOVE.  SEXPIRATION DATE  AGAIN 30, 2007  and I understand that I am I'm non-Agreement States or are limited to a total of 180 days time in the calendar year.  ess for activities performed in
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finclude description of type and quantity of radioactive material, seeled a Cesium 137 NO Single Source.  Americium 241 Beryllium NO Single Source.  18. AGREEMENT STATE SPECIFIC LICENSE WHICH AUTHORIZES THE UNIT ACTIVITIES WHICH ARE THE SAME, EXCEPT FOR LOCATION OF USE, ABOVE (Four copies of the specific license must accompany the 19. CERTIFICATION.  19. CERTIFICATION.  1 Information in this report is true and complete.  1 I have read and understand the provision of the general required to comply with these provisions as to all byprooffshore waters under the general license for which this c. I understand that activities, including storage, conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year.	HEET(S)  NSTALLED, outres, or d  + O C  SERSIGNED  AS SPECIFIE  MILITARY  Illicense 10  duct, sour  report is fill  d in non-A  in off-shor  re listed wo  if above, in  enforceme	TO INCLUIT TO INCLUIT SERVICED, OI SERVICED,	reprinted al nuclear U.S. Nucleates und ich is aud tions and duct of auduct	CERE NUMBER  - 19318  D BY APPLIC  d on the instruct material which care regulator ler general lice ithorized for and at the License activities on da	ANT)  ctions of the high possess ye Commissions are 10 CFR untilmited per home off	state TN is form; and use since and use since addressed of	ITEMS 9-16 ABOVE.  ICS  EXPIRATION DATE  AGC: 1 30, 2007  and I understand that I am In non-Agreement States or  Ire limited to a total of 180 days I time in the calendar year.  ess for activities performed in erent from those described
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finclude description of type and quantity of radioactive material, seeled a Cesium 137 NO Single Source.  Americium 241 Beryllium NO Single Source.  18. AGREEMENT STATE SPECIFIC LICENSE WHICH AUTHORIZES THE UNIT ACTIVITIES WHICH ARE THE SAME, EXCEPT FOR LOCATION OF USE, A ABOVE (Four copies of the specific license must accompany the 19. CERTIFICATION.)  19. CERTIFICATION.  1 Information in this report is true and complete.  1 I have read and understand the provision of the general required to comply with these provisions as to all byprooffshore waters under the general license for which this c. I understand that activities, including storage, conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted above or without NRC authorization, may subject me to CERTIFONS OFFICER - RSO or Management Representative (Name and Tille) Under the CERTIFONS OFFICER - RSO or Management Representative (Name and Tille)	HEET(S)  NSTALLED, outres, or d  10 CONTESS, or d  NS SPECIFIE  Illcense 10  Illcen	TO INCLUIT TO INCLUIT SERVICED, OI EVICES to be u CCEC TO CONDUCT DINITEM 9. Form 241.) ET BE COM  CFR 150.20 Ce, or special lied with the greement St e waters, wh ork site loca cluding con int action, in TURE	reprinted al nuclear U.S. Nucleates und sich is autotions and duct of a actuding c	DEVAPPLIC  d on the instruir material which could be regulator in the instruir of the instruir of the regulator in the regula	ANT)  ctions of the high possess you commiss note 10 CFR until mited in the posses of the control of the contro	state TN is form; and use and use stocked apperiod of	ITEMS 9-16 ABOVE.  ICS  EXPIRATION DATE  AGC: 1 30, 2007  and I understand that I am In non-Agreement States or  are limited to a total of 180 days I time in the calendar year.  ess for activities performed in  erent from those described  DATE  1-2-2003
LIST ADDITIONAL WORK SITES ON SEPARATE S  17. LIST RADIOACTIVE MATERIAL, WHICH WILL BE POSSESSED, USED, II finclude description of type and quantity of radioactive material, seeled a Cesim 137 No Single Source.  Americian 341 Beryllian Do Single Source.  18. AGREEMENT STATE SPECIFIC LICENSE WHICH AUTHORIZES THE UNIT ACTIVITIES WHICH ARE THE SAME, EXCEPT FOR LOCATION OF USE. ABOVE (Four copies of the specific license must accompany the interpretation of the specific license must accompany the interpretation of the general required to comply with these provisions of the general required to comply with these provisions as to all hyprocoffshore waters under the general license for which this concept in calendar year. With the exception of work conducted in calendar year. With the exception of work conducted in understand that activities, including storage, conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way. With the exception of work conducted in calendary way.	HEET(S)  NSTALLED, OUTCES, ord  ALC SC  DERSIGNED  SISSPECIFIE  Initial NRC  ON (MUS  Illcense 10  duct, source report is fl d in non-A in off-shore relisted wo  Isomorphic to ci  18 U.S.C.  18 U.S.C.	TO INCLUIT TO INCLUIT TO INCLUIT SERVICED.  TO CONDUCT	reprinted al nuclear U.S. Nucleates und high is autitions and including corriminal 1001 ma	d on the instruct material which clear Regulator let general lice without or crimina dat the License civil or crimina colvil or crimina co	ctions of the process	is form; and use iton.  150.20 a period of fice addresses to mail	ITEMS 9-16 ABOVE.  ICS EXPIRATION DATE AGGET 30, 2007  and I understand that I am In non-Agreement States or are limited to a total of 180 days time in the calendar year.  ess for activities performed in erent from those described  DATE 1-2-200-3 quire that submissions to ke a willfully false

# Attachment # 1 Calendar Year 2003

January 21-24, 27-31 = 9 days

February 3-7, 10-14, 17-21, 24-28 = 20 days

March 3-7, 10-14, 19-21, 24-28, 31 = 21 days

April 1-4, 9-11, 14-18, 21-25, 28-30 = 22 days

May 1-2, 5-9, 12-16, 19-23, 27-30 = 21 days

June 2-6, 9-13, 16-20, 23-27, 30 = 21 days

July 1-3, 9-11, 14-18, 21-25, 28-31 = 22 days

August 1, 4-8, 11-15, 18-22, 25-27, = 21 days

total = 157 days



## RADIOACTIVE MATERIAL LICENSE

Pursuant to Tennessee Department of Environment and Conservation Regulations, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess and transfer radioactive material listed below; and to use such radioactive material for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules and regulations of the Tennessee Department of Environment and Conservation and orders of the Division of Radiological health, now or hereafter in effect and to any conditions specified below.

LICENSEE	3. License number R-19218-D02 4. Expiration date					
K. S. Ware & Associates, LLC						
2. Address	April 30, 2002					
315 10th Ave. N., Suite 122 Nashville, TN 37203	5. File no. R-19218					
6. Radioactive Material 8. Chemical and/or physical for (Element and Mass Number)						
See Supplementa	ry Sheets					
10. Authorized Use						
See Supplementa	ry Sheets					
CONDITION 11. Unless otherwise specified, the authorized place of use is the l						
See Supplementary Sheets For the Commissioner Tennessee Department of Environment and Conservation						
Date of Issuance April 23, 1997  By:	Donald E. Mynno Division of Radiological Health					
Page of _5 Pages	Ronald E. Wynn					
+0719 (Rev. 9-92) Health Physicist						

## RADIOACTIVE MATERIAL LICENSE

### Supplementary Sheet

	pappiementally patest	
Page 2 of 5 Pages		License Number R-19218-D02
6. Radioactive		9. Maximum Radioactivity and/or Quantity of Material Which
Material (Element	0 Ch :1 1/	
•	8. Chemical and/or	Licensoe May Possess
and Mass Number)	<u>Physical Form</u>	at Any One Time
A. Cesium 137	A. Scaled Source	A. No single source to
	(CPN-131A)	exceed 10 millicaries.
B. Americium 241:	B. Sealed Source	B. No single source to
Beryllium	(CPN-131B)	exceed 50 millicaries,
C. Cesium 137	C. Sealed Source	C. No single source to
	(Troxler Drawing	exceed 9 millicuries.
	Number A-102112C)	·
D. Americium 241:	B. Sealed Source	B. No single source to
Beryllium	(Troxler Drawing Number A-102451D)	exceed 44 millicuries.
10. Authorized use		
A STATE OF THE STA		
	bell Pacific Nuclear Corporation Model M isture and density of construction materials	
modified juriculation.		
gauge for the measu	er Electronics Laboratory Models 3411 or crement of moisture and density of construction	
within the license ju	I ISCHCHOIL	

#### Conditions (continued)

- 12. The licensee shall comply with applicable provisions of 1200-2-4, 1200-2-5, and 1200-2-10, of "State Regulations for Protection Against Radiation."
- 13. Radioactive material authorized by this license may be used at temporary job sites of the licensee, in areas not under exclusive Federal jurisdiction, throughout the State of Tennessee.

Before radioactive materials can be used at a temporary job site at any Federal facility, the jurisdictional status of the job site must be determined. If the jurisdictional status is unknown, the Federal agency should be contacted to determine if the job site is under exclusive Federal jurisdiction. A response should be obtained in writing or a record should be made of the name and title of the person at the Federal agency who provided the determination and the date that it was provided.

## RADIOACTIVE MATERIAL LICENSE

### Supplementary Sheet

Page 3 of 5 Pages

License Number R-19218-D02

Authorization for use of radioactive materials at job sites under exclusive Federal jurisdiction shall be obtained either by: (1) filing a NRC Form-241 in accordance with 10 CFR 150,20(b), "Recognition of Agreement State Licenses,": or (2) by applying for a specific NRC license.

Before radioactive materials can be used at a temporary job site in another State, authorization shall be obtained from the State if it is an Agreement State, or from the NRC for any non-Agreement State. either by filing for reciprocity or applying for a specific license.

- 14. A. Radioactive material authorized by this license shall be used by James E. Trotter.
  - B. The Radiation Safety Officer for this license is James E. Trotter.
- 15.A. Sealed sources authorized by this license shall be tested for leakage and/or contamination at intervals not to exceed six (6) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to transfer, the sealed source shall not be put into use until tested.
  - B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surface of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak tests shall be kept in units of microcuries and maintained for inspection by the Department.
  - C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Division of Radiological Health, Tennessee Department of Environment and Conservation, 3rd Floor L & C Annex, 401 Church Street, Nashville, Tennessee, 37243-1532, describing the equipment involved, the test results, and the corrective action taken.
  - D. Tests for leakage and/or contamination shall be performed by persons authorized by this Department, the U.S. Nuclear Regulatory Commission, or another: Agreement state to perform such services.
- 16. The licensee shall not open sealed sources containing radioactive material or remove sealed sources from their respective source holders.
- 17. Maintenance and repair of devices containing radioactive material, and installation, replacement, removal from service, and disposal of scaled sources containing radioactive material used in devices shall be performed only by the respective device manufacturer or by other persons specifically authorized by this Department, the U. S. Nuclear Regulatory Commission, a Licensing State, or another Agreement State, as appropriate, to perform such services,

## RADIOACTIVE MATERIAL LICENSE

### Supplementary Sheet

Page 4 of 5 Pages

License Number R-19218-D02

- 18. To prevent tampering or removal by unauthorized personnel, each radioactive device anthorized by this license shall be secured in a locked storage container or area when not being used.
- 19. The licensee shall maintain complete and accurate records of the receipt and disposal of radioactive material. The licensee shall, for radioactive material no longer useful for any purpose and for any equipment or supplies contaminated with such material for which further use and decontamination is not planned, define those materials as radioactive waste and treat them as such in accordance with the following provisions:
  - A. Radioactive waste material shall not be stored with non-radioactive waste.
  - B. A written record of all radioactive waste material shall be maintained until it has been determined by a suitable survey or radioassay that it has decayed to background levels or until it has been shipped to an authorized recipient in accordance with all applicable regulations. Accountability of radioactive waste material prepared for shipment but not yet shipped from the licensee's premises shall be maintained by the licensee by an internal record system such that the licensee is constantly aware of the material's location and the proposed time of shipment. Individuals who are involved in the shipping of such material and/or the storage of such material prior to shipment, shall be trained in the precautions necessary for such handling and storage.
  - C. For material which has decayed to background levels as determined by radioassay or external level as measured with appropriately calibrated instruments, records shall indicate that the material was determined to be no longer radioactive and will indicate the methods and results of the survey or analysis.
  - D. Shipment records of radioactive waste material shall be maintained and the licensee shall require written confirmation from the authorized recipient of such material that this material has been received.
  - E. All records and written confirmations required by this condition shall be maintained for inspection by the Department.

The requirements for this condition are in addition to any other requirements for the handling and/or disposal of radioactive material contained in this license and "State Regulations for Protection Against Radiation."

20. The licensee shall conduct a physical inventory every six (6) months to account for all sources and/or devices received and possessed under this license. Records of inventories shall be maintained for inspection by the Department.

## RADIOACTIVE MATERIAL LICENSE

### Supplementary Sheet

Page 5 of 5 Pages

License Number R-19218-D02

- 21. No provision of this license relieves the licensee from compliance with other Federal, State and local laws, ordinances, and regulations applicable to the licensee's activities.
- 22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments.

## RADIOACTIVE MATERIAL LICENSE

### Amendment 1

Page 1 of 1 Page

License Number R-19218-D02

K.S. Ware & Associates, LLC 315 10th Ave. N., Suite 122 Nashville, TN 37203

Attention: James E. Trotter, Radiation Safety Officer

Gentlemen:

As requested by James E. Trotter and in accordance with his letter dated June 2, 1997, your Tennessee Radioactive Material License number R-19218-D02 is amended as follows:

To change Items 10.C and D and Condition 22. These items and this condition will now read as follows:

- 10.C. and D. To be used in Troxler Electronics compac moisture density gauges, all models within the 3400 series, for the measurement of moisture and density of construction materials at various jobsites within the license jurisdiction.
- 22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments, and letter dated June 2, 1997.

All other parts of this license remain unchanged. Date <u>June 2</u>, 1997

For the Commissioner
Tennessee Department of
Environment and Conservation

Вy

Ronald E. Wynn Health Physicist

## RADIOACTIVE MATERIAL LICENSE

#### Amendment 2

Page 1 of 1 Page

License Number R-19218-D02

K.S. Ware & Associates, LLC 315 10th Ave. N., Suite 122 Nashville, TN 37203

Attention: James E. Trotter, Radiation Safety Officer

Gentlemen:

As requested by James E. Trotter and in accordance with his letter dated July 11, 1997, with attachment, your Tennessee Radioactive Material License number R-19218-D02 is amended as follows:

To change Conditions 14A, and 22. These conditions will now read as follows:

- 14. A. Radioactive material authorized by this license shall be used by James E. Trotter, or Charles Ervin.
- 22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments, and letters dated June 2, 1997, and July 11, 1997, with attachment.

All other parts of this license remain unchanged. Date July 11, 1997

For the Commissioner Tennessee Department of Environment and Conservation

Βı

Ronald J. Parsons Health Physicist

## RADIOACTIVE MATERIAL LICENSE

### Amendment 3

Page 1 of 1 Page

License Number R-19218-D02

K.S. Ware & Associates, LLC 315 10th Ave. N., Suite 122 Nashville, TN 37203

Attention: James E. Trotter, Radiation Safety Officer

Gentlemen:

As requested by James E. Trotter and in accordance with his letter dated July 31, 1997, with attachments, your Tennessee Radioactive Material License number R-19218-D02 is amended as follows:

To change Conditions 14A. and 22. These conditions will now read as follows:

- 14. A. Radioactive material authorized by this license shall be used by James E. Trotter, Charles Ervin, or by individuals who have satisfactorily completed the licensee's training course or a training course provided by a device manufacturer, and have been instructed in the licensee's operating and emergency procedures. Records of training for each user shall be maintained by the licensee for inspection by the Department.
- 22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments, and letters dated June 2, 1997, July 11, 1997, with attachment, and July 31, 1997, with attachments.

All other parts of this license remain unchanged. Date August 6, 1997

For the Commissioner Tennessee Department of Environment and Conservation

Вy

Ronald J. Parsons Health Physicist

## RADIOACTIVE MATERIAL LICENSE

### Amendment 4

Page 1 of 1 Page

License Number R-19218-D02

K.S. Ware & Associates, LLC 315 10th Ave. N., Suite 122 Nashville, TN 37203

Attention: James E. Trotter, Radiation Safety Officer

Gentlemen:

As requested by James E. Trotter and in accordance with his letter dated April 29, 1998, your Tennessee Radioactive Material License number R-19218-D02 is amended as follows:

To delete Items 6A, 6B, 8A, 8B, 9A, 9B, 10A, and 10B. These Items are hereby deleted.

To change Items 9C, 9D, and Condition 22. These items and this condition will now read as follows:

- 9.C. Two (2) sources. No single source to exceed 9 millicuries
- 9.D. Two (2) sources. No single source to exceed 44 millicuries
- 22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments, and letters dated June 2, 1997, July 11, 1997, with attachment, July 31, 1997, with attachments, and April 29, 1998.

All other parts of this license remain unchanged. Date April 30, 1998

For the Commissioner Tennessee Department of Environment and Conservation

Βv

Ronald E. Wynn Health Physicist

### RADIOACTIVE MATERIAL LICENSE

### Amendment 5

Page 1 of 1 Page

License Number R-19218-D02

K.S. Ware & Associates, LLC 315 10th Ave. N., Suite 122 Nashville, TN 37203

Attention: James E. Trotter, Radiation Safety Officer

Gentlemen:

As requested by James E. Trotter and in accordance with his letter dated September 15, 1998, with attachments, your Tennessee Radioactive Material License number R-19218-D02 is amended as follows:

To change Conditions 14A. and 22. These conditions will now read as follows:

- 14. A. Radioactive material authorized by this license shall be used by James E. Trotter, Charles Ervin, Laurie Bourg, or by individuals who have satisfactorily completed the licensee's training course or a training course provided by a device manufacturer, and have been instructed in the licensee's operating and emergency procedures. Records of training for each user shall be maintained by the licensee for inspection by the Department.
- 22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments, and letters dated June 2, 1997, July 11, 1997, with attachment, July 31, 1997, with attachments, April 29, 1998, and September 15, 1998, with attachments.

All other parts of this license remain unchanged. Date September 23, 1998

For the Commissioner
Tennessee Department of
Environment and Conservation

Вv

Ronald J. Parsons Health Physicist

## RADIOACTIVE MATERIAL LICENSE

### Amendment 6

Page 1 of 1 Page

License Number R-19218-D02

K.S. Ware & Associates, LLC 315 10th Avenue North, Suite 122 Nashville, Tennessee 37203

Attention: James E. Trotter, Radiation Safety Officer

Gentlemen:

As requested by James E. Trotter and in accordance with his letters dated December 31, 1998, with attachments, and March 17, 1998 (received March 22, 1999), with attachment, your Tennessee Radioactive Material License number R-19218-D02 is amended as follows:

To change Condition 22. This condition will now read as follows:

22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments, and letters dated June 2, 1997, July 11, 1997, with attachment, July 31, 1997, with attachments, April 29, 1998, September 15, 1998, with attachments, December 31, 1998, with attachment, and March 17, 1998 (received March 22, 1999), with attachments.

This amendment acknowledges the change of the physical storage location of the gauges listed on this license, to a new location within the lab.

All other parts of this license remain unchanged.

Date: April 7, 1999

For the Commissioner
Tennessee Department of
Environment and Conservation

Gerald W. Bacon Health Physicist

### RADIOACTIVE MATERIAL LICENSE

### Amendment 7

Page 1 of 1 Page

License Number R-19218-D02

K.S. Ware & Associates, LLC : 315 10<sup>th</sup> Avenue North, Suite 122 Nashville, Tennessee 37203

Attention: James E. Trotter, Radiation Safety Officer

Gentlemen:

As requested by James E. Trotter and Charles Ervin, and in accordance with their letter dated April 14, 1999, your Tennessee Radioactive Material License number R-19218-D02 is amended as follows:

To change Conditions 14 and 22. These conditions will now read as follows:

- 14. A. Radioactive material authorized by this license shall be used by James E. Trotter, Charles Ervin, Laurie Bourg, or by individuals who have satisfactorily completed the licensee's training course or a training course provided by a device manufacturer, and have been instructed in the licensee's operating and emergency procedures. Records of training for each user shall be maintained by the licensee for inspection by the Department.
  - B. The Radiation Safety Officer for this license is Charles Ervin.
- 22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments, and letters dated June 2, 1997, July 11, 1997, with attachment, July 31, 1997, with attachments, April 29, 1998, September 15, 1998, with attachments, December 31, 1998, with attachment, March 17, 1998 (received March 22, 1999), with attachments, and April 14, 1999.

All other parts of this license remain unchanged.

Date: April 26, 1999

For the Commissioner
Tennessee Department of
Environment and Conservation

y\_\_\_\_\_

Gerald W. Bacon Health Physicist

#### RADIOACTIVE MATERIAL LICENSE

#### Amendment 8

Page 1 of 1 Page

License Number R-19218-D02

K.S. Ware & Associates, LLC 315 10<sup>th</sup> Avenue North, Suite 122 Nashville, Tennessee 37203

Attention: James E. Trotter, Radiation Safety Officer

Gentlemen:

As requested by Charles Ervin and in accordance with his letter dated July 6, 2000, your Tennessee Radioactive Material License number R-19218-D02 is amended as follows:

To change Items 9.C and 9.D, and Conditions 14 and 22. These items and this condition will now read as follows:

- 9.C. Three (3) sources. No single source to exceed 9 millicuries.
- 9.D. Three (3) sources. No single source to exceed 44 millicuries.
- 14. A. Radioactive material authorized by this license shall be used by Charles Ervin, Eric Snyder, Victor B. Pusser, Emily Hughes, Bill Bruce, or by other individuals who have satisfactorily completed the licensee's training course or a training course provided by the device manufacturer, and have been instructed in the licensee's operating and emergency procedures. Records of training for each user shall be maintained by the licensee for inspection by the Department.
  - B. The Radiation Safety Officer for this license is Charles Ervin.
- 22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments, and letters dated June 2, 1997, July 11, 1997, with attachment, July 31, 1997, with attachments, April 29, 1998, September 15, 1998, with attachments, December 31, 1998, with attachment, March 17, 1998 (received March 22, 1999), with attachments, April 14, 1999, and July 6, 2000.

All other parts of this license remain unchanged.

Date: November 27, 2000

For the Commissioner Tennessee Department of Environment and Conservation

Gerald W. Bacon

Health Physicist

Rular

## RADIOACTIVE MATERIAL LICENSE

## Amendment 9

Page 1 of 1 Page

License Number R-19218-D07

K.S. Ware & Associates, LLC 54 Lindsley Avenue Nashville, Tennessee 37210

Attention: Charlie Ervin, Radiation Safety Officer

Gentlemen:

As requested by Charlie Ervin and in accordance with his letters dated January 3, 2002, with attachment, and May 9, 2002, with attachment, your Tennessee Radioactive Material License number R-19218-D02 is amended as follows:

To change Items 2, 3, 4, and Condition 22. These will now read as follows:

- 54 Lindsley Avenue Nashville, Tennessee 37210
- 3. R-19218-D07
- 4. April 30, 2007
- 22. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 8, and 9 of this license in accordance with statements, representations, and procedures contained in application dated April 14, 1997, with attachments, and letters dated June 2, 1997, July 11, 1997, with attachment, July 31, 1997, with attachments, April 29, 1998, September 15, 1998, with attachments, December 31, 1998, with attachment, March 17, 1998 (received March 22, 1999), with attachments, April 14, 1999, July 6, 2000, January 3, 2002, with attachment, and May 9, 2002, with attachment.

This amendment extends the expiration date of the license to that in Item 4.

All other parts of this license remain unchanged.

Date: May 17, 2002

For the Commissioner Tennessee Department of Environment and Conservation

By

Gerald W. Bacon Health Physicist