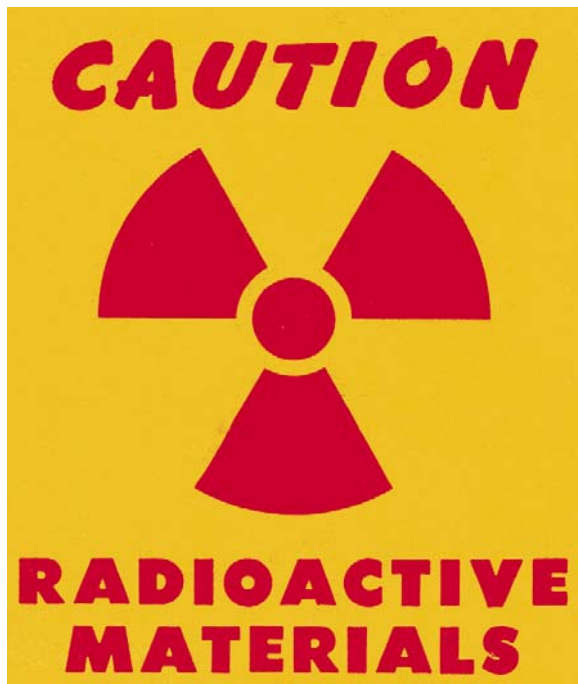


"Caution – Radioactive Materials" Signs



"Intentionally Blank"

“Radioactive Yellow II” Label



Note:

This label is for a Troxler Model 3440 Series gauge;
the activities and Transport Index will differ for other gauge models

Gauge Transport/Storage Container ID Labels

**USA DOT 7A TYPE A
RADIOACTIVE
MATERIAL
TYPE A PACKAGE
SPECIAL FORM, NON
FISSILE OR FISSILE
EXCEPTED, UN 3332 RQ**

(Troxler ID Label)

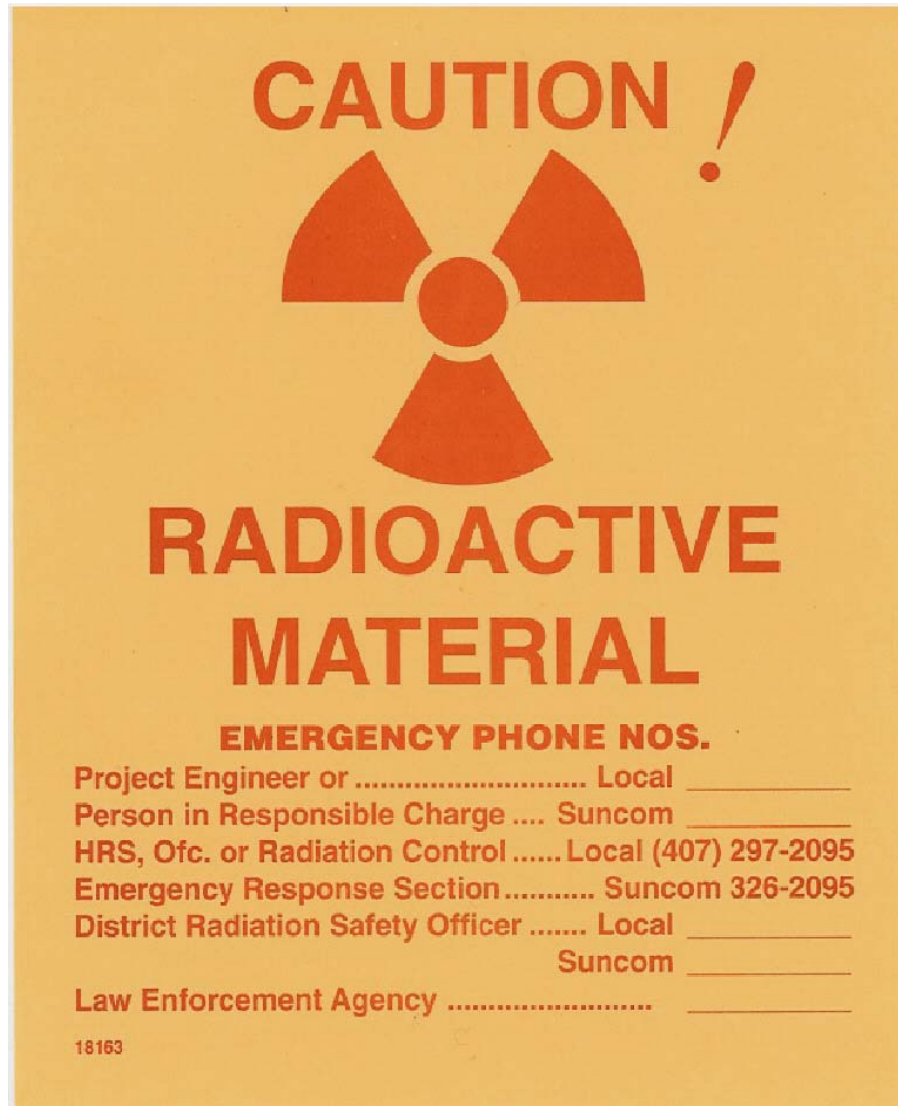
**USA DOT 7A TYPE A
RADIOACTIVE MATERIAL
TYPE A PACKAGE, SPECIAL FORM
7, UN3332, RQ**

(ADS ID Label)

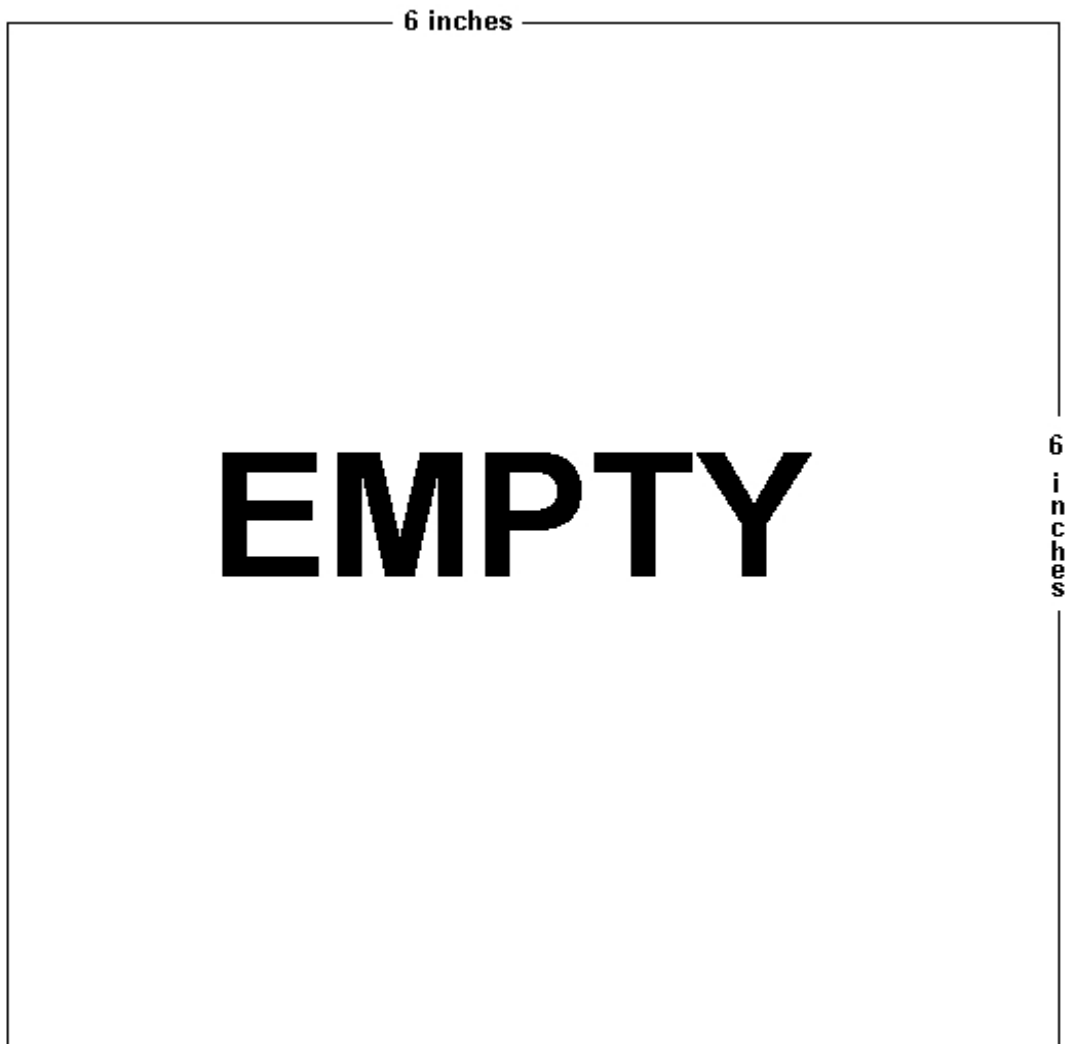
Gauge Warning/ID Label

DO NOT REMOVE	Florida Dept. of Transportation	CAUTION RADIOACTIVE MATERIAL	
		<input type="text"/>	<input type="text"/>
		TYPE	QUAN. (mCi)
		<input type="text"/>	<input type="text"/>
SER. No.		MEAS. DATE	
NOTIFY CIVIL AUTHORITIES IF FOUND			
Florida Dept. of Transportation		DO NOT REMOVE	

Emergency Phone Numbers Dashboard Label



"Empty" Label



"Intentionally Blank"

DOH Notice To Employees



FLORIDA DEPARTMENT OF HEALTH



NOTICE TO EMPLOYEES

STANDARDS FOR PROTECTION AGAINST RADIATION;
NOTICES, INSTRUCTIONS AND REPORTS TO WORKERS; INSPECTIONS

POSTING REQUIREMENT

THIS NOTICE MUST BE POSTED IN PLACES THAT PERMIT EMPLOYEES IN A RESTRICTED AREA TO SEE A COPY ON THE WAY TO OR FROM THEIR PLACE OF EMPLOYMENT.

The Department of Health has established standards for protection against radiation hazards in Chapter 64E-5, Florida Administrative Code.

YOUR EMPLOYER IS REQUIRED TO:

- Post or provide you a copy of the Department of Health rules and operating procedures that apply to your work and explain them to you.
- Apply the rules to work involving radiation sources.
- Post or provide you any Notice of Violation involving radiological working conditions, proposed civil penalties, and orders.

YOU ARE REQUIRED TO:

- Become familiar with the rules and the operating procedures that apply to your work.
- Observe the requirements to protect yourself and your co-workers.

WHAT IS IN THESE RULES:

- Limits on exposure to radiation and radioactive material in restricted and unrestricted areas
- Actions to take after accidental exposure
- Personnel monitoring, surveys, and equipment
- Caution signs, labels, and safety interlocks
- Exposure records and reports
- Options for workers about Department of Health inspections
- Related matters

REPORTS ON RADIATION EXPOSURE

Your employer must give you a written report if you receive an exposure above the limits in the rules or in the license. The maximum limits for exposure to employees are in Part III of the rules. However, your employer should keep your radiation exposure as low as reasonably achievable.

If you work where personnel monitoring is required:

- Your employer must give you a written annual report of your radiation exposures.
- Your employer must give you a written report of your radiation exposures when you terminate employment.

INSPECTIONS

Representatives of the Department of Health inspect all licensed and registered activities. Any worker or worker representative who believes that there is a violation of Chapter 404, Florida Statutes; Chapter 64E-5, Florida Administrative Code; or the terms of the employer's license or registration can request an inspection by contacting the Bureau of Radiation Control, Bin C21, 4052 Bald Cypress Way, Tallahassee, FL 32399-1741 (850) 245-4266. The request must state specific reasons for the inspection. During inspections, Department of Health inspectors can confer privately with workers and any worker can bring to the attention of the inspectors any past or present condition that they believe contributed to or caused any violation.

Copies of Chapter 64E-5, F.A.C., the license or registration, operating procedures, any notice of violation about working conditions, penalty orders issued, and responses can be examined at:

Emergency Notification Poster

**In the Event of an Accident,
Damage, Loss, or Theft
of a Density Gauge**

IMMEDIATELY NOTIFY:

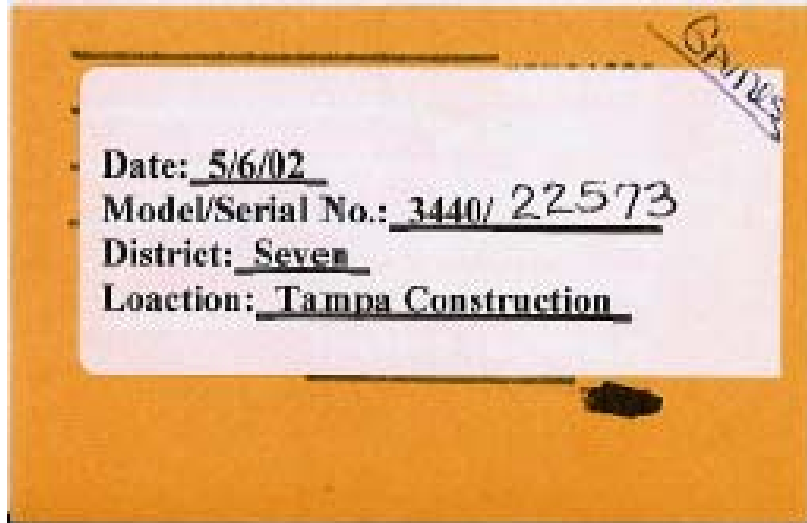
Dist. Radiation Safety Officer:	Office:
	Cell:
Asst. Dist. Rad. Safety Officer:	Office:
	Cell:
State Radiation Safety Officer :	Ben Watson
	Office: (352) 955-2935
	Cell: (352) 318-0539
Radiation Safety Consultant:	Walt Cofer
	Office: (850) 668-8559
	Cell: (850) 519-5351

**FOR STATE RADIATION EMERGENCY
NOTIFICATION OR ASSISTANCE, CALL:**
(407) 297-2095
(Monitored 24/7)

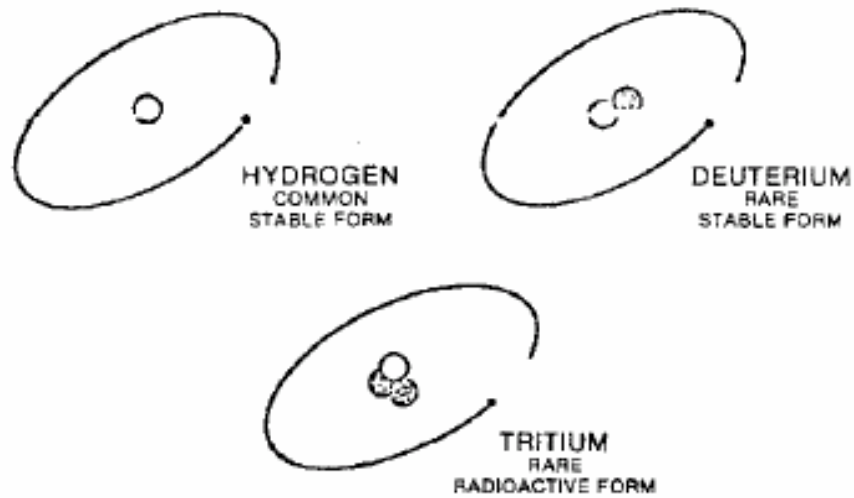
If damage to a gauge is suspected:

- Clear the area; establish a 10-15 ft. barricade around the gauge; restrict access to authorized personnel only
- Except for those requiring medical attention, do not allow personnel (or vehicles) to leave the area until cleared by the FDOH Bureau of Radiation Control

Leak Test Kit



Symbol Meanings



— Isotopes of the element hydrogen.

SUBSTANCE SYMBOL	PROTONS (Z)	ATOMIC MASS NUMBER (A)	NEUTRONS (A-Z)	ELECTRONS (Z)
HYDROGEN ${}_1\text{H}^1$	1	1	0	1
DEUTERIUM ${}_1\text{H}^2$ OR ${}_1\text{D}^2$	1	2	1	1
TRITIUM ${}_1\text{H}^3$ OR ${}_1\text{T}^3$	1	3	2	1
OXYGEN ${}_8\text{O}^{16}$	8	16	8	8
URANIUM ${}_{92}\text{U}^{238}$	92	238	146	92

— Symbol meanings.

Periodic Table of the Elements

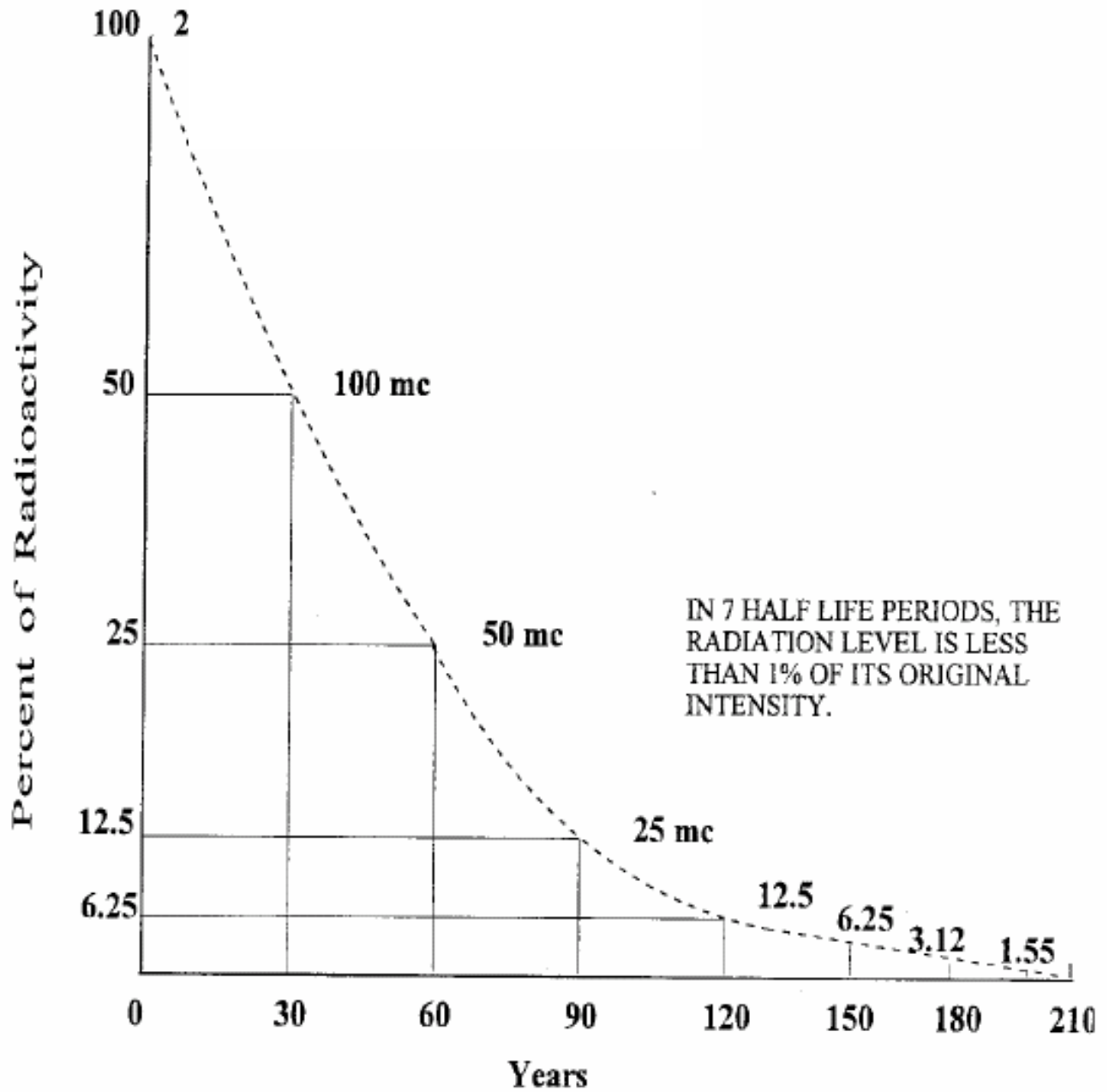
	IA																	0
1	1 H																2 He	
2	3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
3	11 Na	12 Mg	III B	IV B	V B	VI B	VII B	VIII — VII —			IB	IIB	13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
6	55 Cs	56 Ba	*57 La	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
7	87 Fr	88 Ra	89 +Ac	104 Rf	105 Ha	106 Sg	107 Ns	108 Hs	109 Mt	110	111	112	113					

* Lanthanide Series

+ Actinide Series

58	Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu
90	Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr

Cesium-137 Decay Chart



Gauge Certificate

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*****
* TROXLER ELECTRONIC LABORATORIES, INC. *
* GAUGE CERTIFICATE *
* ORIGINAL *
*****

TROXLER GAUGE MODEL: 3448 TRANSFERRED ON: 24 SEPT 1999
GAUGE SERIAL NUMBER: 38617 SALES ORDER NUMBER: 9112712

*TO* *FROM*
CODE : 3482008 *FROM*
LICENSE: 189-1 32-182-1
NAME : FLORIDA DOT TROXLER ELECT. LABORATORIES, INC.
STATE MATERIALS OFFICE P O BOX 12037
2806 N.E. WALDO RD. RESEARCH TRIANGLE PARK, NC 27709
GRINEVILLE, FL 32604

SEALED SOURCE SEALED SOURCE
-----
08-137 RADIOACTIVE MATERIAL AM-241:5E
758- 5157 SOURCE SERIAL NUMBER 47-27721
.30 GBq ( 8.088 uCi) ACTIVITY 1.48 GBq ( 40.088 uCi)
13 MAY 1999 DATE OF MEASUREMENT 07 SEPT 1998
100112 TROXLER DRAWING NUMBER 10245(
08/353/025 SPECIAL FORM CERTIFICATE 08/7/5-05
024444 ANSI SPECIFICATION 088944
22 SEPT 1999 ***** DATE OF LEAK TEST***** 22 SEPT 1999

RETAIN THIS DOCUMENT AS A RECORD OF GAUGE RECEIPT. THIS INFORMATION IS
PROVIDED TO ASSIST IN COMPLIANCE WITH APPLICABLE RULES AND REGULATIONS.

SPECIAL FORM CERTIFICATE - THIS GAUGE CONTAINS RADIOACTIVE MATERIAL IN THE
FORM OF SEALED SOURCES THAT HAVE BEEN CERTIFIED AS MEETING US DOT AND IAEA
"SPECIAL FORM" CRITERIA. YOU ARE REQUIRED TO HAVE A COPY OF THE SPECIAL FORM
CERTIFICATE LISTED ABOVE FOR EACH SOURCE TO TRANSPORT OR SHIP THIS GAUGE.
PLEASE NOTE THAT EACH CERTIFICATE HAS AN EXPIRATION DATE. YOU MAY CONTACT
TROXLER ELECTRONIC LABORATORIES, INC. TO OBTAIN A CURRENT CERTIFICATE UPON
EXPIRATION.

LEAK TEST - THIS GAUGE WAS LEAK TESTED ON THE DATE SHOWN ABOVE AND THE
REMOVABLE ACTIVITY WAS FOUND TO BE LESS THAN 0.005 MICROCURIES. YOU ARE
REQUIRED TO PERFORM LEAK TESTS AT PERIODIC INTERVALS AS SPECIFIED BY
APPLICABLE REGULATORY REQUIREMENTS.

TYPE A PACKAGE TESTING - THE SHIPPING CASE MEETS US DOT 7A TYPE A PACKAGE
CRITERIA. YOU ARE REQUIRED TO POSSESS A COPY OF THE US DOT 7A TYPE A PACKAGE
TESTING RESULTS IN ORDER TO TRANSPORT OR SHIP THIS GAUGE. A COPY MAY BE
OBTAINED FROM TROXLER ELECTRONIC LABORATORIES, INC.

THE PROPER SHIPPING NAME, CLASSIFICATION, AND MARKING FOR THIS GAUGE IS:
RD, RADIOACTIVE MATERIAL, SPECIAL FORM, N.G.S., 7, UN2974, US DOT 7A TYPE A
PACKAGE, RADIOACTIVE YELLOW II, T1 - 0.5

CERTIFIED BY W. P. [Signature] FOR TROXLER ELECTRONIC LABORATORIES, INC.
```

Type A Package Certification

TRONER ELECTRONIC LABORATORIES, INC.
P.O. BOX 13007, COLUMBIAS 29215
RESEARCH TRIANGLE PARK, NORTH CAROLINA 27709, U.S.A.
Telephone 919/469-8442, Cable Troneler, Telex 1044902

TYPE A PACKAGE CERTIFICATION

Tronier Electronic Laboratories, Inc. certifies that their models 1153, 1253, 1351, 1352, 2218, 3074, 2410 Series, 3105, 3206, 3200 Series, 3300 Series, 3400 Series, 1241, 1565 and 4640 contain Type A quantities of special form radioactive materials and are packed for shipment in Specification 7A Type A containers.

These containers meet the requirements of United States Department of Transportation CFR 173.24 and are designed and constructed to meet the standards as specified in CFR 173.413 and 173.465. These containers are marked and labeled in conformance with CFR 173.464. These regulations are in agreement with the regulations for the Safe Transport of Radioactive Materials (Safety Series No. 6) of the International Atomic Energy Agency as amended.

A copy of this certification must remain on file as required by CFR 173.415(a).

TRONER ELECTRONIC LABORATORIES, Inc.


G. Kenneth Brown, Jr.
Radiation Safety Officer

Declaration of Pregnancy

To: _____
Employee Supervisor

In accordance with section 64E-5.311, Florida Administrative Code (FAC),

I, _____, am declaring that I am pregnant.

I believe that I became pregnant in: _____
Month Year

I understand that the radiation dose to my embryo/fetus during my entire pregnancy will not be allowed to exceed 500 millirem (5 mSv) unless that dose has already been exceeded between the time of conception and submitting this declaration. I understand that meeting the lower dose limit may require a change in job or job responsibilities during my pregnancy. I have been instructed to always wear my assigned dosimeter at waist level to estimate the embryo/fetus dose. I will make every effort to maintain the fetal dose as low as reasonably achievable (ALARA), and I am aware that the Florida Department of Health (DOH) recommends that an embryo/fetus not receive more than 50 millirem (0.5 mSv) in any one month. I understand that records of fetal dose will be maintained with my dose records.

I have received instructions on exposure monitoring requirements for declared pregnant women conducting activities involving sources of radiation, in accordance with the requirements of the Department's radiation safety program, the terms and conditions of the Department's radioactive materials license, and Chapter 64E-5, FAC.

I have also received instructions concerning the potential risks involved for pregnant women exposed to radiation, including a copy of Nuclear Regulatory Commission Regulatory Guide 8.13. "Instruction Concerning Prenatal Radiation Exposure" (Rev. 3, 6/99), which I have been encouraged to review. I understand that a declaration of pregnancy is voluntary, must be in writing, and must include the estimated date of conception.



I have been encouraged to request additional information if needed. I am aware that the Department Radiation Safety Officer (RSO) and District RSO are available to answer any questions I may have regarding declared pregnancies, and that radiation safety specialists from the DOH Bureau of Radiation Control are also available to answer my questions.

Signature

Printed Name

Date

Bill of Lading

	FLORIDA DEPARTMENT OF TRANSPORTATION	
BILL OF LADING		
SHIPPER:	Florida Department of Transportation	SHIPMENT DATE
ADDRESS:	State Materials Office	
	Materials Research Park, 5007 NE 39th Ave.	
	Gainesville, FL 32609-890 1	
PHONE NO.:	(352) 318-0539 (Ben Watson, RSO - cell)	
<u>DESCRIPTION</u>		
Radioactive Material, Type A Package, Special Form Hazard Class 7, UN3332, RQ		
<u>PACKAGE CONTENTS</u>		
<u>Radioactive Material</u>	<u>Activity (maximum)</u>	
Cesium-137	0.88 GBq (9 mCi)	
Americium-241:Be	1.48 GBq (44 mCi)	
<u>LABEL CATEGORY:</u>	Radioactive Yellow II	
<u>TRANSPORT INDEX:</u>	0.6	
24-HR. EMERGENCY RESPONSE INFORMATION NUMBER: (407) 297-2095 FL Dept. of Health Bureau of Radiation Control		
Trolox Model 3400 Series Portable Moisture/Density Gauge		
<small>Note: This document must be kept on file for 2 years beyond the last shipment.</small>	Gauge Serial No.: _____	

EMERGENCY RESPONSE INFORMATION

DESCRIPTION

Radioactive Material, Type A Package, Special Form, Hazard Class 7, UN3332, RQ

POTENTIAL HAZARDS

IMMEDIATE HAZARDS TO HEALTH

- Radioactive material; type and quantity are non-life-endangering amounts and present minimal risk during transportation accidents.
- Undamaged packages are safe; damaged packages or material released from packages present potential external radiation hazard from unshielded radioactive material.
- Radioactive materials are in special form (sealed sources); contamination is not expected.
- If special form capsule(s) breached (possible if package damage is severe), potential internal radiation hazard from inhalation, ingestion, or breaks in skin.

FIRE OR EXPLOSION

- No risk of fire or explosion; radioactivity does not change flammability or other properties of the materials.
- Packagings can be consumed without content loss from sealed sources

EMERGENCY ACTION

IMMEDIATE PRECAUTIONS

- Priority response actions may be performed before taking radiation measurements.
- Priorities are life saving, control of fire and hazards, and first aid.
- Isolate hazard area to at least a 15 foot radius and deny entry.
- Notify local authorities and FDOH Bureau of Radiation Control (407/297-2095) of accident conditions
- Detain uninjured persons, isolate equipment with suspected contamination, and delay cleanup until instructions received from FDOH Bureau of Radiation Control.

FIRE

- Do not move damaged containers; move undamaged containers out of fire zone.
- Fight fire from maximum distance.
- Small fire: Dry chemical, CO₂, water spray, or standard foam.
- Large fire: Water spray, fog (flooding amounts).

SPILL OR LEAK

- Do not touch damaged containers or exposed contents.
- Damage to outer container may not affect primary inner container.
- Special form capsules are not expected to leak as a result of an accident or fire.
- If source(s) out of package, stay away and await advice from FDOH Bureau of Radiation Control.

FIRST AID

- Use first aid treatment according to the nature of the injury.
- Persons exposed to special form sources are not likely to be contaminated, but if suspected, advise medical personnel that victim(s) may be contaminated with radioactive material.
- If contamination is suspected, remove and isolate potentially contaminated clothing and shoes if not affecting injuries and wrap victim in blanket before transporting.
- Except for the injured, detain persons exposed to radiation until instructed by FDOH Bureau of Radiation Control.

Emergency Procedure Checklist

Perform the below steps if a gauge is involved in an incident.

1. Determine category of incident

Stationary

Go to Step 2

Misadventure

Go to Step 2

Transported

Go to Step 2

Fire

Go to Step 3

Loss/Theft

Go to Step 5

2. Dose gauge appear damage or is the source exposed? Yes No

- If Yes:**
- A. Wrap the source in plastic, paper or close woven material to prevent spread of radioactive material
 - B. Pack the wrapped source in a sack of damp soil
 - C. Go to Step 4

If No: Go to Step 4

3. Do not attempt to move gauge; go to Step 5

4. Is gauge in a safe location? Yes No

If Yes: Go to Step 5

If No: Move gauge or vehicle containing gauge to a safe location; note old and new locations

5. If gauge was being transported, is lost or stolen, or if a member of the public is involved, contact local law enforcement; go to Step 6

6. Record the following information:

A. Gauge Information

Gauge Mfr.

Gauge Model

Gauge Serial No.

B. Location: _____

6. Incident information (contd.)

C. Description of incident: _____

D. Vehicle Info.: Tag No.: _____ Vehicle No.: _____

7. Notifications

The operator or individual involved in or discovering the incident must immediately notify their Project Engineer/person-in-charge, their Dist. Radiation Safety Officer, Asst. DRSO, the State RSO, or DRSO/ADRSO designee.

List of Persons Contacted

Project Engineer:	_____	#: _____
Responsible Person-In-Charge:	_____	#: _____
Dist. RSO:	_____	#: _____
Asst. Dist. RSO:	_____	#: _____
State RSO:	_____	#: _____
Other: (list title)	_____	#: _____
Other: (list title)	_____	#: _____

The operator, Project Engineer, responsible person-in-charge, Dist. RSO, or designee must immediately notify the DOH Bureau of Radiation Control at (407) 297-2095 (monitored 24/7) and follow the instructions provided by DOH.

DOH Representative: _____ Date/Time: _____

8. Description of DOH instructions: _____



Florida Department of Transportation



Notification of FDOT Nuclear Gauge Storage Area

Notification

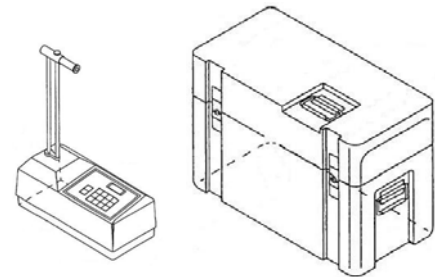
This form documents required notifications and provides information on the gauges relevant to emergency personnel.

Date: _____ Notification Provided To: _____

Notification Provided By: _____

Description

Portable nuclear gauges are used to test density and moisture content of soils and construction materials. Each device contains two low activity radioactive sealed sources (metal capsules containing small amounts of radioactive material). The Americium-241: beryllium source (used for moisture measurements) is located beneath the gauge's electronic panel. The Cesium-137 source (for density measurements) is located at the tip of the source rod, which is shielded by the body of the gauge when not in use.



Nuclear gauge

Transport/storage case
(yellow or orange)

Emergency Contacts

Dist. Radiation Safety Officer (RSO)..... _____

Asst. District RSO..... _____

FDOT RSO..... _____

FDOH Bureau of Radiation Control..... (407) 297-2095 (24 hr. no.)