THE
LANE
CONSTRUCTION
CORPORATION
A Commitment to Excellence

90 Fieldstone Court
Cheshire, CT 06410-1212
203-235-3351
203-237-4260 Fax
www.lanecontruct.com

Br 3

November 23, 2009

Licensing Assistant Section
Nuclear Materials Safety Branch
U.S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, Pa 19406-1415 03015231

Re: License Number 06-06284-02 – Amendment Request

On August 28, 2009 The Lane Construction Corporation assumed ownership of Contractor's Paving Corporation, Inc. located at 3431 Trant Ave., Norfolk, Va and all its assets, among which was an InstroTek, Model 3500 nuclear density gauge S/N 562. Because of proximity to, and work on U.S. military sites in the Norfolk area we would request that the InstroTek gauge be added to our above NRC license.

Attached herewith:

#1 – InstroTek Gauge Source Certificate
#2 – Letter of Gauge Ownership Transfer – CPC to Lane
#3 – Current Leak Test
#4 – Updated Radiation Safety Program and Procedures

RECEIVED
REGION 1
2009 NOV 27 AM 7:48

The Lane Construction Corporation

Lawrence D. Tonini
Manager Plant Safety Programs / Corp. RSO

cc: Michele Teets
Heath Entwisle
File

144313
NMSS/RGN1 MATERIALS-002

Attachment #1

InstroTek Gauge Source Certificate

InstroTek, Inc. Nuclear Gauge Certificate

Model: 3500 Xplorer

Ship Date: 1/5/07

Serial Number: 562

Transfer From:

InstroTek, Inc.
5908 Triangle Drive
Raleigh, NC 27617
USA
[p] : 919-875-8371 [f] : 919-875-8328

License No.: 092-1073-1
Exp. Date: 7/31/07

Transfer To:

Ed Manley
Contractors Paving Company, Inc.
3431 Trant Ave
Norfolk, VA 23502-3116
USA
[p] : 757-340-1161 [f] : 757-340-4582

License No.: 45-31202-01
Exp. Date: 11/30/16

Sealed Source

10 mCi +/-10% (370MBq), Cs137	**Activity/Radioactive Material**	40 mCi +/-10% (1.48GBq), Am241:Be
DC.805 or HEG-13	**Source Model Number**	AMN.V977 or AM1.N02
USA/0634/S-96	**Special Form Certificate**	USA/0632/S-96
C66546	**ANSI Specification**	E66545
1/5/07	**Date of Leak Test**	1/5/07
CDCK.7788	**Source Code**	AMNQ.9927
9277CM	**Manufacturing Source S/N**	NJ5773
4/28/06	**Source Measure Date**	8/29/06

Leak Test

The above referenced leak test revealed the removable activity to be less than 0.005 microcurie

Special Form Certificates

Radioactive materials used in this gauge have been certified as "Special Form" by a recognized "Competent Authority"

Proper Shipping Name

RQ, Radioactive Material, Special Form, NON FISSILE OR FISSILE EXCEPTED UN 3332, US DOT 7A Type "A" Package, Radioactive Yellow II

Friday, January 05, 2007

Attachment #2

Letter of Gauge Ownership Transfer – CPC to Lane

CONTRACTORS PAVING CO., INC.
P. O. BOX 12849
NORFOLK, VIRGINIA 23541-2849

August 28, 2009

Mr. Ron Burton
Plant Manager
Virginia Paving Company
P.O. Box 12849
Norfolk, VA 23541

Subject: Transfer of Instrotek Nuclear Gauge

Dear Mr. Burton:

This letter serves as notification that Contractors Paving Company, Inc. will be transferring ownership of its Instrotek Nuclear Gauge, Serial #562, Model #3500 Xplorer to Virginia Paving Company, division of Lane Construction Corporation. The gauge will continue to be stored at 3431 Trant Avenue, Norfolk, VA 23502.

If further information is needed, please contact me.

Sincerely,

CONTRACTORS PAVING CO., INC.

E.J. Manley
Vice President

Cc: Larry Tonini,
The Lane Construction Corporation, Cheshire, CT

TELEPHONE (757) 340-1161 • FAX (757) 340-4582

Attachment #3

Current Leak Test Certificate

InstroTek, Inc.
5908 Triangle Drive
Raleigh, NC 27617
(919)875-8371 Fax (919)875-8328

1/23/2009
Test Number: 5

HEATH ENTWISLE
CONTRACTORS PAVING COMPANY INC
P.O. BOX 12849
NORFOLK, VA 23541 2849

Phone: (757)340-1161
Fax: (757)340-4582

LEAK TEST CERTIFICATE

NC Materials License #092-1073-1

This certifies that leak test analysis was conducted on the sample with the following information. The results shown below accurately represent the level of removable contamination.

Gauge Model: 3500 Gauge S/N: 562 Test Date: 1/20/2009

Source (Model/Serial#)	Reading in microCuries
NJ5773	0.00000
9277CM	0.00028

Note: 0.005 microCuries (185 Bq) or greater is considered a leaking source.° The source(s) tested above may remain in use.

Reviewed by: _____ Date: 01/23/09

RSO Signature: _____ Date: _____

°CPN gauges are 50 mCi Am241:Be and 10 mCi Cs-137. Humboldt gauges are 40 mCi Am241:Be and 10 mCi Cs-137. InstroTek Gauge is 40 mCi Am241:Be and 10 mCi Cs-137. Troxler gauges all, except 4640, are 40 mCi Am241:Be and 8 mCi Cs-137. Troxler 4640 is 8 mCi Cs-137.

Attachment #4

Updated Radiation Safety Program and Procedures

THE
LANE
CONSTRUCTION
CORPORATION

RADIATION SAFETY PROGRAM
OPERATING AND EMERGENCY INSTRUCTIONS
FOR NUCLEAR DENSITY GAUGES

I. CORPORATE INFORMATION:

The Lane Construction Corporation
90 Fieldstone Court
Cheshire, CT 06410
Radiation Safety Officer: Lawrence D. Tonini

II. NUCLEAR DENSITY GAUGES:

We utilize Troxler Electronic Laboratories, Inc., Series 3400 portable moisture/density gauges, Series 4640 asphalt density gauges, and Series 3200 asphalt content gauges, a Humboldt 5001B portable moisture density gauge, and an Instro-Tek, Model 3500 portable moisture density gauge. Radioactive materials involved are Cesium 137, and Americium 241.

III. STORAGE:

Permanent storage location(s) have been designated as:

90 Fieldstone Court, Cheshire, Ct 06410

and at temporary jobsites anywhere in the United States. Additionally, in those states having their own jurisdictional authority over the use of this material, storage locations are as identified in license applications for those states.

All gauges will be kept in a locked box or cabinet, within a locked building or otherwise secure container such as a storage trailer. There must be a minimum of two locks in combination as security. "Radioactive" and "Employee Notice" posters must be posted.

IV. TRANSPORTATION:

The gauge will be transported in the Troxler transportation case at all times. The equipment must be secured in a locked box permanently affixed to the vehicle in the case of a pickup truck or other truck types, or within the locked trunk of a passenger car, secured against movement. A chain and lock

system is also permitted for transportation in pickup trucks for short trips. At all times during transport, the operator must have a properly completed Bill of Lading for each gauge. Additionally, a copy of the DOT Emergency Response Information must be in the vehicle.

V. UTILIZATION PROCEDURES:

1. When the gauge is in the field, the authorized user must maintain control of the gauge at all times. The gauge must never be left unattended.

2. Gauges will only be used by or under the supervision and in the physical presence of, individuals who have satisfactorily completed the Troxler Electronics Laboratories, Inc., (or similar training) and who hold valid certificates of training.

3. All users must be thoroughly familiar with these operating and emergency instructions.

4. When not making measurements, the gauge should be placed in the transportation case and returned to its permanent storage area as soon as possible. The gauge is to be used for its intended purpose only. By doing so, any radiation exposure will be as low as reasonably achievable (ALARA). The Lane Construction Corporation is committed to assuring ALARA exposures and will implement all recommendations made by the gauge manufacturer to achieve this purpose.

5. When using the gauge, unauthorized persons must be kept at least 15 feet from the gauge.

VI. RADIATION EXPOSURE MONITORING:

1. When using the gauge, the authorized user must wear a radiation film badge. This badge (TLD Dosimeter) will measure X-ray, Gamma and Beta radiation exposure to the user. Film badges will be obtained from and evaluated after exposure by Landauer, Inc., Glenwood, Illinois. Any exposure in excess of 5,000 mREM per year for the whole body, 50,000 mREM per year for the extremities and skin, or 15,000 mREM per year for the eyes, will be cause to remove the exposed individual from gauge use, to be evaluated by medical personnel, and to be reported to the governing agency. Exposure to a declared pregnant woman must not exceed 500 mREM for the nine-month period of pregnancy. Occupational exposure to workers under the age of 18 is restricted to 1/10 of the adult annual dose. These limits apply only to occupational exposure. Badges will be

exchanged and evaluated quarterly during use. When not using the equipment, the badge must be stored in a radiation-free area.

2. Badges must also be worn during maintenance of the gauge and during leak testing.

VII. MAINTENANCE AND LEAK TESTING:

1. Maintenance procedures will follow the manufacturer's recommendations. No maintenance will be performed which involves removal of the source from the gauge.

2. Troxler Electronics Laboratories, Inc. or the gauge manufacturer will perform all service work beyond normal routine maintenance provided for in the manufacturer's instructions.

3. Film badges must be worn during cleaning, leak testing, and other maintenance of the gauge.

4. Leak tests will be performed every twelve months, unless the gauge has not been used in the preceding twelve months, using the Troxler Model 3880 Leak Test Kit. The gauge may not be used if it has been in storage in excess of twelve months until such time as it has been leak-tested and results have been received.

VIII. UTILIZATION LOG:

Utilization logs will be maintained at each location in possession of a gauge. The log must be capable of identifying the location of each gauge at all times and in whose possession it is. Logs must show:

1. Model and Serial Number
2. Date and Time Removed and Returned
3. User
4. Destination
5. Signature of User

IX. AUDITS

The corporate RSO, or his designee, who has oversight responsibilities for both state and federal radiation programs, will conduct a management audit every 12 months.

X. EMERGENCY PROCEDURES:

1. In the event of physical damage to the gauge, the following steps must be taken:
    a. Locate the source.
    b. An area of 15 feet in radius from the gauge must be cordoned off and entry of unauthorized persons prevented.
    c. If a vehicle is involved, it must not be moved until the extent of contamination has been determined.
    d. A visual inspection of the gauge must be made to determine whether any damage to the source housing or shield has been sustained.
    e. As soon as possible, after the situation has been established, notify Lawrence D. Tonini at (203) 235-3351 (cell (413) 329-1700). Instructions will be given regarding procedures and further notification. If the situation involves an emergency during transportation, emergency assistance and information will be provided by Troxler at (919) 549-9539.

2. In the event that the gauge is lost or stolen, L.D. Tonini must be notified immediately.

XI. SHIPPING:

Shipping of gauges must follow all applicable regulations. Federal Express or Yellow Freight Lines will be used. Due to the infrequency of gauge shipment by outside personnel, the person performing the shipment should contact L.D. Tonini for information regarding proper transportation methods, or, in the event that the gauge is being shipped back to Troxler, Humboldt or InstroTek, The manufacturer's personnel should be contacted concerning proper documentation.

XII. TRANSFERS:

Inventory records must reflect all moves and will be verified every six months. Prior to transfer, L.D. Tonini must be notified. If being transferred to an Agreement State, the appropriate agencies will be notified in order to obtain a materials license, or reciprocity, depending on the need.

XIII. DISPOSAL:

Disposal will be handled solely by Troxler Electronics Laboratories, Inc., Humboldt Mfg. Corp., or InstroTek, Inc.

XIV. RESPONSIBILITY:

Each user is responsible for the proper use of the gauges and must follow the above procedures at all times.

The radiation safety officer, L.D. Tonini, is responsible for assuring overall compliance with these procedures and for maintaining current knowledge of all applicable rules and regulations.

TROXLER NUCLEAR GAUGE EMERGENCY RESPONSE INFORMATION
REQUIRED FOR TRANSPORTATION
(Reference DOT P5800.5 ERG93, and 49CFR)

1. PROPER SHIPPING NAME:

- RADIOACTIVE MATERIAL, SPECIAL FORM, NON-FISSILE/FISSILE EXCEPTED, 7 UN3332

POTENTIAL HAZARDS

2. HEALTH HAZARDS

- Radiation presents minimal risk to lives of persons during transportation accidents.
- Undamaged packages are safe; damaged packages or materials released from packages can cause external radiation hazards. Contamination is not suspected.
- Packages (cartons, boxes, drums, articles, etc.) identified as "Type A" by marking on packages or by shipping papers contain non-life endangering amounts. Radioactive sources may be released if packaged are damaged in moderately-severe accidents.\
- Packages (large and small, usually metal) identified by "Type B" by marking on packages or by shipping papers contain potentially life endangering amounts. Because of design, evaluation, and testing of packages, life-endangering releases are not expected in accidents except those of utmost severity.
- Commonly available instruments can detect most of these materials.
- Water from cargo fire control is not expected to cause pollution.

3. FIRE OR EXPLOSION

- Packaging can be consumed without content loss form sealed source capsule.
- Radioactive source capsules and Type B packages are designed to withstand temperatures of 1475 °F (800 °C).

EMERGENCY ACTION

4. IMMEDIATE PRECAUTIONS

- Priority response actions may be performed before taking radiation measurements.
- Priorities are life saving, control of fire and other hazards, and first aid.
- Isolate hazard area and deny entry. Notify Radiation authority of accident conditions.
- Delay final cleanup until instruction or advice of Radiation Authority.
- Positive pressure self-contained breathing apparatus (SCBA) and structural firefighter's protection clothing will provide adequate protection against internal radiation exposure, but not external radiation exposure.
- **Call Troxler Electronic Laboratories, Inc. at (919) 549-9539 for Emergency Assistance.**

5. FIRE

- Do not move damaged packages; move undamaged packages out of fire zone.
- **Small Fires:** Dry chemical, CO_2 water spray or regular foam.
- **Large Fires:** Water spray, fog (flooding amounts).

6. SPILL OR LEAK

- **Do not touch damaged packages or spilled material.**
- Slightly damaged or damp outer surfaces seldom indicate failure of inner container.
- If source is identified as being out of package, stay away and await advice from Radiation Authority.
-

7. 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 with radioactive material.
- Report all incidents to L.D. Tonini at (203) 235-3351, Ext. 2958 (Cell (413) 329-1700)

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

11/23/09, and to inform you that the initial processing which includes an administrative review has been performed.

Amendment (06-06284-02)

[X] There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

[ ] Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 144313.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader