



FOUNDATION ENGINEERING, INC.

SOIL BORING & TESTING
ENGINEERING ANALYSIS & REPORTS
CONSTRUCTION QUALITY CONTROL
FOUNDATION INSPECTION & DESIGN

BOX 3607 RFD LONG GROVE, ILLINOIS 60047 (312) 882-2450
LABORATORY AT 650 MORSE SCHAUMBURG, IL 60193

October 24, 1985
Control #79576

NCR
799 Roosevelt Road
Glen Ellyn, IL 60137

Attention: Mr. Mike McCan

Gentlemen:

In accordance with your request, I am enclosing back up materials and answering questions as follows:

1. Nuclear Density Gauges Location:
650 Morse Avenue
Schaumburg, IL 60193
2. Troxler Certificate: Enclosed
3. Safety Program: Attend yearly seminar, leak test was performed
by Troxler lab at Lake Villa, IL
See Attached our printed materials.
4. Badge service are provided by: R.S. Landauer, Jr. & Co.
2 Science Road
Glenwood, IL 60425

A copy of invoice enclosed

Should you have any questions, please do not hesitate to contact this office.

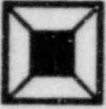
Very truly yours,

Chang H. Choi, P.E.
Principal

RECEIVED
NOV 7 1985
REGION III

NOV 7 1985

8601210298 851121
REQ LIC30
12-18754-02 PDR



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RADIATION SAFETY & EMERGENCY PROCEDURES PROGRAM

To ensure compliance with the provisions of 10CFR Part 19, "Notices, Instructions and Reports to Workers, Inspection," and Part 20, "Standards for Protection Against Radiation", Soil Testing Services, Inc., has established the following procedures for usage of the nuclear density and moisture gauges.

Item A

Emergency Procedures in the event of accidents involving either damage or loss of gauge are included on the Radiological Assistance sheet shown in red attached to each unit. This sheet indicates the names and telephone numbers of individuals to be notified immediately in the event of an accident.

Item B

Safety measures to be used in transporting the devices and the user's vehicle shall include transporting the unit in the manufacturer's shipping container. The shipping container should be locked at all times. In addition, the shipping container should be away from the passenger compartment as far as possible.

Item C

To prevent unauthorized access to the unit, the unit or the shipping containers should be locked when not in use or when not under user's direct supervision. When the units are stored on the job site, the job construction trailer should be locked when the unit is not under the user's observation.

Item C

To prevent unauthorized use or removal of the gauges from the storage place in the laboratory, the door is locked at all times and only laboratory supervisors have the key.

Item D

The user is not to tamper with or dismantel or remove any parts of the gauges. Any servicing or internal adjusting or any dismanteling is to be performed by the manufacturer.

Item E

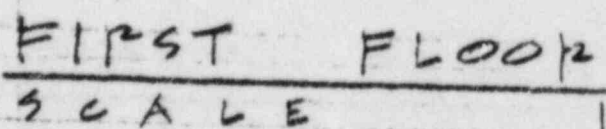
All maintenance and repair of gauges will be performed by the manufacturer.

Item F

Leak tests on each instrument is required every six months. The manufacturer will perform this test.

Item G

Each user is required to keep with each unit the required license, leak test certificate, emergency procedures, and the operator manual. Each user is required to wear a film badge when using the unit. The film badge is not to be stored any place near the unit.



THESE SHALL BE APPROVED LOUVERED DOORS FOR HEATER ROOM VENTILATION.
(SEE BOCA MECH. CODE, SECT. M-1001)

 *
 * SPECIAL FORM RADIOACTIVE SOURCE CERTIFICATE *
 * ORIGINAL *

THIS DOCUMENT MUST BE RETAINED BY THE RECIPIENT OF ANY RADIOACTIVE MATERIALS UNTIL SUCH TIME THAT THE MATERIALS ARE TRANSFERRED INTO THE POSSESSION OF ANOTHER LICENSEE. THE RECORD OF THIS TRANSFER MUST BE RETAINED FOR A PERIOD OF FIVE YEARS. A COPY OF THIS DOCUMENT MUST BE KEPT WITH THE RADIOACTIVE MATERIAL WHILE BEING TRANSPORTED ON PUBLIC HIGHWAYS.

SEALED SOURCE

 40 6399
 102112
 CS137
 7.3

 C64444
 GB/140/S
 15 JUN, 1982
 03 NOV, 1982

CODE/SERIAL
 TROXLER DRAWING NUMBER
 MATERIAL TYPE
 ACTIVITY IN MILLICURIES
 NEUTRON OUTPUT (N/S)
 ANSI SPECIFICATION
 SPECIAL FORM CERTIFICATE
 DATE OF MEASUREMENT
 DATE OF LEAK TEST

SEALED SOURCE

 47 5557
 102451
 AM241:BE
 40
 7.9 X10⁷ 4
 C64544
 GB/7/S
 06 APR, 1982
 03 NOV, 1982

SOURCE(S) ARE CONTAINED IN TROXLER MODEL 3401B 9088
 TRANSFERRED ON 03 NOV, 1982. SALES ORDER NUMBER C0119:9

TO
 CODE : 4408000
 LICENSE: 12-18754-01
 NAME : FOUNDATION ENGINEERING CO.
 1131 S. FERNANDEZ AVENUE

ARLINGTON HEIGHTS, IL 60005

FROM
 32-182-1
 TROXLER ELECT. LABORATORIES, INC
 P. O. BOX 12057
 RESEARCH TRIANGLE PARK, NC 27709
M. L. 6-1-82
 RADIATION SAFETY DEPARTMENT

**** QUALITY CONTROL ****

- A. IMMERSION TEST-THE SOURCE IS IMMERSSED IN WATER WHICH IS RAISED TO 100 DEGREES C AND HELD AT THAT TEMPERATURE FOR 10 MINUTES. THE WATER IS THEN REMOVED, THE SOURCE COOLED, AND THE PROCEDURE REPEATED TWICE. SOURCES ARE PASSED IF THE ACTIVITY EXTRACTED IN THE FINAL PROCEDURE DOES NOT EXCEED 0.005 MICROCURIES.
- B. BUBBLE TEST-THE SOURCE IS IMMERSSED IN A SUITABLE LIQUID (ETHANEDIOL) AND THE PRESSURE IN THE VESSEL REDUCED TO 100 MILLIMETERS OF MERCURY. NO BUBBLES MUST BE OBSERVED.
- C. LEAK TEST-THE SOURCE IS WIPED WITH A TISSUE, MOISTENED WITH SOLVENT; THE ACTIVITY REMOVED IS MEASURED WITH A FLOW-THRU COUNTER CAPABLE OF DETECTING 0.00005 MICROCURIES. THE REMOVEABLE ACTIVITY MUST NOT EXCEED 0.005.
- D. ANSI-THE LIMITS OF TEST FOR THE LISTED SPECIFICATION MAY BE DETERMINED BY REFERRING TO ANSI N542-1977 ISSUED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE. THE CLASSIFICATION IS BASED ON SAFETY REQUIREMENTS FOR TYPICAL USES AND DEFINES TEMPERATURE, EXTERNAL PRESSURE, IMPACT, VIBRATION AND PUNCTURE.
- E. IAEA SPECIAL FORM-TESTS FOR 'SPECIAL FORM' ARE CERTIFIED BY THE COMPETENT AUTHORITY FOR THE NATION OF ISSUE BASED ON TESTS WHICH CONFORM TO IAEA SAFETY SERIES NO. 6. THE REQUIRED TESTS ARE PERCUSSION, HEAT, AND IMPACT.
- F. RECOMMENDED WORKING LIFE-A WORKING LIFE OF 15 YEARS IS RECOMMENDED FOR THIS SOURCE AND IS BASED ON TOXICITY, HALF-LIFE, INITIAL ACTIVITY, CAPSULE DESIGN AND OPERATIONAL EXPERIENCE. SOME USAGE MAY SHORTEN THIS LIFE AND IT IS THE USER'S RESPONSIBILITY TO ASSESS AT WHAT POINT DURING THE 'RECOMMENDED WORKING LIFE' THE SOURCE SHOULD BE REPLACED.

CONVERSATION RECORD

TIME

2:50 pm

DATE

3 September 1985

TYPE

☐ VISIT☐ CONFERENCE☐ TELEPHONE☐ INCOMING☐ OUTGOING

ROUTING

NAME/SYMBOL

INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT
WITH YOU

Chang H. Choi

ORGANIZATION (Office, dept., bureau,
etc.) Foundation Engineering Inc
Long Grove, IllTELEPHONE NO.
(312) 882-
2450

SUBJECT

CN 79576

SUMMARY

Need following additional information before license will be amended:

- 1) diagram of storage area at 650 Morse Ave, Schaumburg, Ill including adjoining areas plus access and security statement.
- 2) Users - Choi only?
- 3) leak testing - Trexler only? & maintenance & repair
- 4) transport to ^{procedures} temporary do site and security at sites
- 5) No. of devices?
- 6) Emergency procedures?

Requested Mr Choi to stop by office if he has further problems there appears to be a slight communication problem, both written and oral.

ACTION REQUIRED

Requested response within

NAME OF PERSON DOCUMENTING CONVERSATION

Mike McLean

SIGNATURE

Mike McLean

DATE

September 85

ACTION TAKEN

SIGNATURE

TITLE

DATE