

YU & Associates, Inc.
Geotechnical, Environmental, and Civil Engineering

L-Ø

May 08, 2009
0600012

RECEIVED
REGION 1
2009 MAY 12 AM 10:50

Mr. Craig Gordon
United States Nuclear Regulatory Commission - Region I
475 Allendale Road
King of Prussia, Pennsylvania 19406-1415

Re: Response to Your Letter dated April 9, 2009
Docket No. 03036397
NYC Inspection Report No. 03036397/2009001

29-30837-01

Dear Mr. Gordon:

YU and Associates, Inc. (YU) has prepared this letter in response to your April 9, 2009 letter (received April 16, 2009) regarding a Notice of Violation following your March 27, 2009 safety inspection at our offices. Your letter required us to respond to the following items:

- A. Contrary to the requirement of 10CFR 20.1101©, we had not provided evidence of a periodic (at least annual) review of the safety program Content and implementation since 2006.
- B. Contrary to Condition 20 of NYR License No. 29-30387-01 requiring that we, the licensee, conduct our program in accordance with statements, representation, and procedures contained in the application dated August 6, 2003 – we had not provided evidence of implementing or maintaining Operating and Emergency Procedures. More specifically, the emergency procedures did not have current licensee contact information (names, phone numbers) of individuals to be notified in the event of an emergency.

Our respective responses are as follows:

- A. In order to correct this violation, our office completed an audit in May 2009 and shall henceforth conduct and maintain annual records as required by our license. A copy is attached.
- B. In order to correct this violation, we have updated our Operating and Emergency Procedures and will distribute same to each authorized user. A copy is attached.



NMSS/RGNI MATERIALS-004

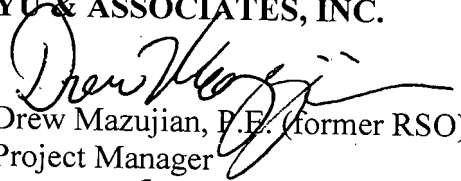
Third Floor • Elmwood Park, NJ 07407 • (201) 791-0075 • Fax: (201) 791-4533
www.yu-associates.com


Your original letter has been posted as required. Please note that Radiation Safety Officer (RSO) responsibilities which were in transition at the time of your inspection have been concluded. Mr. Reynante Clavel is our current RSO. A copy of our License Amendment also is attached for your information.

YU & Associates, Inc. is committed to the proper handling of the Troxler gauge, and appreciates your attention to this matter. We have attached a copy of your April 9, 2009 letter to complete this correspondence. We hope this response proves satisfactory to the Nuclear Regulatory Commission. If you have any questions or comments, please contact us.

Very Truly Yours,

YU & ASSOCIATES, INC.


Drew Mazujian, P.E. (former RSO)
Project Manager


Reynante Clavel (current RSO)
Senior Staff Engineer

DM/RC:dm

Attachments:

1. 2009 Audit
2. Operating Emergency Procedures
3. License Amendment
4. April 9, 2009 Letter from NRC to YU & Associates, Inc.

APPENDIX I PORTABLE GAUGE AUDIT CHECKLIST

NOTE

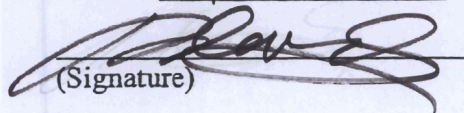
Information in this **checklist** provided by the U.S. Nuclear Regulatory Commission (NRC).

NOTE

All areas indicated in audit notes may not be applicable to every license and may not need to be addressed during each audit.

Licensee's name Yu & Associates, Inc. License No. 29-30837-01

Auditor Reynante Clavel Date of Audit 4-3-2009 Telephone No. 201-755-9559


(Signature)

1. AUDIT HISTORY

- Last **audit** of this location conducted on (date) March 1, 2006
- Were previous **audits** conducted yearly? [10 CFR 20.1101] No. Corrective action taken: 4-3-2009 Audit
- Were records of previous **audits** maintained? [10 CFR 20.2102] Yes. Troxler Information Main Book (Tab 8)
- ~~Were~~ any deficiencies identified during last two audits or two years, whichever is longer? Yes.
- Were corrective actions taken? (Look for repeated deficiencies).
1) Annual refresher overdue at most 2 months (corrective action 3/2006)
2) Log not completed for sliding block check (remedied log to include 2/17/2006)

2. ORGANIZATION AND SCOPE OF PROGRAM

- If the mailing address or places of use **changed**, ~~was~~ the license amended? Yes. Amended license received on 3-21-09
- If ownership changed or bankruptcy filed, ~~was~~ NRC prior consent obtained or was NRC notified? Not Applicable. from Region I NRC (Docket #: 030363)
- If the **RSO** was changed, was license amended? Does new RSO meet NRC training requirements? RSO changed from Drew Mazujan to Reynante Clavel on 3/26/2009, License Amended 3/26/2009. RSO (new) meets NRC training requirements.
- If the designated **contact person** for NRC changed, was NRC notified? Yes, on Feb. 25, 2009; letter was sent w/ all certificates
- Does the license **authorize** all of the NRC-regulated radionuclides contained in gauges possessed? Yes, both Cesium 137 and Americium 241; Beryllium.
- Are the gauges as described in the Sealed **Some** and Device (SSD) Registration Certificate or Sheet? Have copies of (or access to) **SSD** Certificates? Have manufacturers' manuals for operation and maintenance? [10 CFR 32.210] Yes for all items.
- Are the **actual uses** of gauges consistent with the authorized uses **listed** on the license? Yes!
- Is **RSO** fulfilling his/her duties? Yes!

3. TRAINING AND INSTRUCTIONS TO WORKERS

- a. Were all workers who are likely to exceed 100 mrem/yr instructed per [10 CFR 19.12]? Refresher training provided, as needed [10 CFR 19.12]? *Not Applicable. No operators are likely to exceed 100 mrem/yr.*
- b. Did each gauge operator attend an approved course prior to using gauges? *Yes.*
- c. Are training records maintained for each gauge operator? *Yes.*
- d. Did interviews with operators reveal that they know the emergency procedures? *Yes.*
- e. Did this audit include observations of operators using the gauge in a field situation? *Yes.*
- f. Operating gauge? Performing routine cleaning and lubrication? Transporting gauge? Storing gauge? *Yes.*
- g. Did the operator demonstrate safe handling and security during transportation, use, and storage? *Yes.*
- h. HAZMAT training provided as required? [49 CFR 172.700, 49 CFR 172.701, CFR 172.702, 49 CFR 172.703, 49 CFR 172.704] *Yes.*

4. RADIATION SURVEY INSTRUMENTS

- a. If the licensee possesses its own survey meter, does it meet the criteria of the NRC? *Yes.*
- b. If the licensee does not possess a survey meter, are specific plans made to have one available? *N/A.*
- c. Is the survey meter needed for non-routine maintenance calibrated as required [10 CFR 20.1501]? *Yes.*
- d. Are calibration records maintained [10 CFR 20.2103(a)]? *Yes.*

5. GAUGE INVENTORY

- a. Is a record kept showing the receipt of each gauge? [10 CFR 30.51(a)(1)] *Yes.*
- b. Are all gauges received physically inventoried every six months? *Yes.*
- c. Are records of inventory results with appropriate information maintained? *Yes.*

6. PERSONNEL RADIATION PROTECTION

- a. Are ALARA considerations incorporated into the radiation protection program? [10 CFR 20.1101(b)] *Yes.*
- b. Is documentation kept showing that unmonitored users receive <10% of Limit? *Yes.*
- c. Did unmonitored users' activities change during the year, which could put them over 10% of limit? *No.*
- d. If yes to c. above, was a new evaluation performed? *N/A.*

e. Is **external dosimetry** required (user receiving >10% of limit)? In addition, is dosimetry provided to users? **Yes.**

1. Is the dosimetry supplier **NVLAP** approved? [10 CFR 20.1501(c)] **Yes.**

2. Are the dosimeters exchanged **monthly** for film badges and at **industry** recommended frequency for **TLDs**? **Yes.**

3. Are dosimetry **reports** reviewed by **the RSO** when they are received? **Yes.**

4. Are the records **NRC Forms** or equivalent? [10 CFR 20.2104(d), 10 CFR 20.2106(c)] **Yes.**

♦ NRC-4 "Cumulative Occupational Exposure **History**" completed? **Yes.**

♦ NRC-5 "Occupational **Exposure** Record for a Monitoring Period" completed? **Yes.**

5. If a worker declared her pregnancy, did **licensee** comply with [10 CFR 20.1208]? **N/A.**

♦ ~~Were~~ records **kept** of **embryo/fetus** dose per 10 CFR 20.2106(e)? **N/A.**

f. Are records of **exposures, surveys, monitoring, and evaluations** maintained [10 CFR 20.2102, 10 CFR 20.2103, 10 CFR 20.2106] **Yes.**

7. PUBLIC DOSE

a. Are **gauges** stored in a **manner** to keep **doses** below 100 mrem in a year? [10 CFR 20.1301(a)(1)] **Yes. (37.5 mrem/year >)**

b. Has a **survey** or evaluation been performed per 10 CFR 20.1501(a)? **→ Yes.** Have there been any additions or **changes** to the **storage, security, or use** of surrounding **areas** that would necessitate a new survey or evaluation? **No.**

c. Do **unrestricted** area radiation levels **exceed** 2 mrem in **any** one hour? [10 CFR 20.1301(a)(2)] **Yes. (12 mrem)**

d. Are gauges being stored in a **manner** that would prevent unauthorized use or removal? [10 CFR 20.1801] **Yes. (Gauge handle lock, Container lock, Locker lock, Room lock,**

e. Records maintained? [10 CFR 20.2103, 10 CFR 20.2107] **→ Yes.**

Basement door lock, Building entrance door lock)

8. OPERATING AND EMERGENCY PROCEDURES

a. Have operating and emergency procedures been developed? **Yes.**

b. Do they contain the required elements? **Yes.**

c. Does each operator have a current copy (telephone **numbers**) of the operating and emergency procedures? **Yes.**

d. Does each operator have a current copy (telephone **numbers**) of the operating and emergency procedures? **Yes.**

9. LEAK TESTS

- a. ~~Was~~ each **sealed source** leak tested every 6 months or at other prescribed intervals? **Yes.**
- b. ~~Was~~ the leak test **performed** as **described** in **correspondence** with **NRC** and according to the **license**? **Yes**
- c. Are records of results retained with the appropriate **information** included? **Yes.**
- d. **Were any sources** found **leaking** and if **yes**, was **NRC** notified? **No leaks were found since 10-31-08.**

10. MAINTENANCE OF GAUGES

- a. Are manufacturer's **procedures** followed for routine cleaning and lubrication of gauge? **Yes.**
- b. ~~Does~~ the source or source rod **remain** attached to the gauge during cleaning? **Yes.**
- c. Is non-routine **maintenance performed** where the source or source rod is detached from the gauge? If yes, **was** it performed according to license requirements (e.g., extent of work, individuals performing the work, procedures, dosimetry, survey instrument, compliance with **10 CFR 20.1301 limits**)? **Yes to all items.**

11. TRANSPORTATION

- a. DOT-7A or other authorized packages used? [49 CFR 173.415, 49 CFR 173.416(b)] **Yes (on box)**
- b. Package **performance** test records **on file**? **Yes (inside box)**
- c. Special form sources documentation? [49 CFR 173.476(a)] **Yes (inside box)**
- d. Package has 2 labels (ex. **Yellow-II**) with TI, Nuclide, Activity, and Hazard Class? [49 CFR 172.403, 49 CFR 173.441] **Yes (on box)**
- e. Package properly **marked**? [49 CFR 172.301, 49 CFR 172.304, 49 CFR 172.310, 49 CFR 172.324] **Yes (on box)**
- f. Package closed and sealed during transport? [49 CFR 173.475(f)] **Yes**
- g. Shipping papers prepared and used? [49 CFR 172.200(a)] **Yes.**
- h. Shipping papers contain proper **entries**? {Shipping name, Hazard **Class**, Identification Number (UN Number), Total Quantity, Package Type, Nuclide, RQ, Radioactive **Material, Physical and Chemical Form, Activity**, category of label, TI, Shipper's Name, Certification and Signature, **Emergency** Response Phone Number, Cargo Aircraft Only (if applicable)) [49 CFR 172.200, 49 CFR 172.201, 49 CFR 172.202, 49 CFR 172.203, 49 CFR 172.204, 49 CFR 172.604] **Yes to all items**
- i. Shipping papers within **drivers** reach and readily accessible during transport? [49 CFR 177.817(e)] **Yes.**
- j. Secured against movement? [49 CFR 177.834] **Yes.**
- k. Placarded on vehicle, if needed? [49 CFR 172.504] **Yes.**
- l. **Proper** overpacks, if used? [49 CFR 173.25] **Yes.**
- m. Any incidents reported to **DOT**? [49 CFR 171.15, 16] **No. No incidents as of 4-3-2009**

12. AUDITOR'S INDEPENDENT SURVEY MEASUREMENTS (IF MADE) - *No Independent Survey Measurements made.*
- a. Describe the type, location, and results of measurements. Do any radiation level exceed regulatory limits?

13. NOTIFICATION AND REPORTS

- a. ~~Was~~ any radioactive material lost or stolen? Were reports made? [10 CFR 20.2201, 10 CFR 30.501] *No.*
- b. Did any reportable incidents occur? Were reports made? [10 CFR 20.2202, 10 CFR 30.501] *No.*
- c. Did any overexposures and high radiation levels occur? Reported? [10 CFR 20.2203, 10 CFR 30.501] *N/A*
No.
- d. If any events (as described in items a through c above) did occur, what was root cause? Were corrective actions appropriate? *N/A.*
- e. Is the licensee aware of telephone number for NRC Emergency Operations Center? [(301) 816-5100] *Yes.* *(609) 984-5462 (Business hours)*
(877) 927-6339 (Off-hours/holidays) } *NJDEP Radiation Incident Hotlines*
US NRC Emergency #: (301)-816-5100

14. RECORD KEEPING FOR DECOMMISSIONING

- a. Records kept of information important to decommissioning? [10 CFR 30.35(g)]
- b. Records include all information outlined [10 CFR 30.35(g)] *Yes.*

Yes. (In Nuclear Gauge binder, Yu office)

15. BULLETINS AND INFORMATION NOTICES

- a. NRC Bulletins, NRC Information Notices, NMSS Newsletters. received? *Yes.*
- b. Appropriate training and action taken in response? *Yes.*

16. SPECIAL LICENSE CONDITIONS OR ISSUES

- a. Did auditor review special license conditions or other issues (e.g., non-routine maintenance)? *Yes.*

17. DEFICIENCIES IDENTIFIED IN AUDIT; CORRECTIVE ACTIONS

- a. Summarize problems/deficiencies identified during audit.
- b. If problems/deficiencies identified in this audit, describe corrective actions planned or taken. Are corrective actions planned or taken at ALL licensed locations (not just location audited)?
- c. Provide any other recommendations for improvement.

Two deficiencies were identified during this audit:
1) No evidence of periodic (at least annual) review of safety program
Resolution: Audit performed on 4-3-2009.

Troxler Licensing Guide

I-5

2) No evidence of implementing or maintaining Operating and Emergency Procedures; more specifically, emergency numbers/contact information not updated.

Resolution: Operating and Emergency Procedures Manual updated (2009) including current RSO (Reynante Clavel), current emergency contact information

18. EVALUATION OF OTHER FACTORS

- a. Senior licensee management is appropriately involved with the radiation protection program and/or Radiation Safety Officer (RSO) oversight? *Yes.*
- b. RSO has sufficient time to perform his/her radiation safety duties? *Yes.*
- c. Licensee has sufficient staff to support the radiation protection program? *Yes.*

YU & Associates, Inc.
OPERATING AND EMERGENCY
PROCEDURES MANUAL

Introduction

This manual describes the operational safety procedures to be followed when using Nuclear Density Gauges. This manual must be used in conjunction with the Troxler Operator's Manual and Troxler Transportation Guide, the New Jersey Administrative Code (NJAC 7:28), and current U.S. Nuclear Regulatory Commission (NRC) publication for Portable Gauges (NUREG-1556).

Gauge Description

Troxler Moisture-Density Gauge:

Model No. 3430, Serial No. 34640

Radiological Specification:

Gamma Source: Cesium-137 = $0.3 \pm 10\%$ GBq ($8 \pm 10\%$ mCi)

Neutron Source: Americium-241:Beryllium = $1.48 \pm 10\%$ GBq ($40 \pm 10\%$ mCi)

Sealed Source Special Form

Source Housing: Stainless Steel

Shielding: Tungsten, Lead, and Cadmium

Mechanical Specification:

Gauge Size (w/o handle) = 4.45 x 8.85 x 6.45 inches

Rod = 23.25 inches for 12-inch rod

Transportation Case = 29.5 x 14.0 x 17.0 inches

Weight = 29 lbs

Storage Facility

A. Permanent Location:

1. The building (located at 611 River Drive, Elmwood Park, NJ 07407) is rigidly constructed with adequate fire safety equipment and located in a commercially zoned area.
2. The gauge is stored in a separate room in the basement level of the building. The storage cabinet is located in a remote area where only occasional personnel use is anticipated. The area is kept locked and secured at all times with keys available only to licensed operators. In addition, the gauge's source rod is kept locked when not in use.
3. The room and the cabinet both are posted with appropriate radiation warning signs.
4. The building is locked and secured during non-working hours. Security guards make occasional rounds around the and inside the building.
5. The facility meets with the approval of the Radiation Safety Officer (RSO).
6. The Building Manager has the name, address, and phone number of the RSO and his designated alternate who can be contacted in case of emergency.
7. The facility is periodically inspected for compliance to the abovementioned requirements.

B. Temporary Location (if storing the gauge at jobsite):

1. The building shall be rigidly constructed, with adequate fire safety equipment and located in a commercially-zoned area.
2. The gauge will be stored in a separate room, if possible. If this is not possible, the storage cabinet will be located in a remote area where only occasional personnel use is anticipated. In either case, the area will be kept locked and secured at all times with keys available only to licensed operators. In addition, the gauge's source rod is kept locked when not in use.
3. The room cabinet both will be posted with appropriate radiation warning signs.
4. The building will be locked and secured during non-working hours. If available, security guards will make rounds to check on above.
5. The facility will be inspected by and meet with the approval of the RSO.
6. The building superintendent will be given the name, address and phone number of the RSO and his designated alternate who can be contacted in case of emergency.
7. The facility shall always be subject to inspection for compliance to abovementioned requirements.

C. Storage in Vehicle:

1. If the gauge is going to be stored overnight in vehicle, the following conditions must be met:
 - a. Prior to approval by the RSO will be necessary.
 - b. Vehicle must be locked and display the appropriate radiation warning signs.
 - c. Vehicle must be kept at same location as where certified operator is staying. In addition, the vehicle must be parked in a well-lighted area for security reasons.
 - d. At no time shall the gauge be taken inside a private residence or a motel room overnight.
2. If an accident occurs while driving the vehicle, follow conditions under Emergency Procedures.

Operator's Qualifications

To become a certified operator, the individual must have satisfactorily completed the operator's course given by the manufacturer for the gauge he will be using. The manufacturer will train operators on the following topics:

- A. Nature of sources
- B. Operation of equipment
- C. Safety procedures for normal operation
- D. Emergency procedures
- E. Packaging and shipping of radiation

In addition, the RSO will train operators on the following:

- A. Radiation exposure factors
- B. Occupational dose limits
- C. Radiation monitoring
- D. Film badge usage
- E. Reporting malfunctions or

Exposure Monitoring Procedures

Each certified operator is provided with a monitoring film badge which is to be submitted to Troxler Electronic Laboratories, Inc. located at 3008 Cornwallis Road P.O. Box 12057 Research Triangle Park, NC 27709. Results of gamma and neutron dosage testing should be reviewed and filed each month.

A record of exposure information is maintained and monitored by the RSO. Under average conditions, at a distance of 2 ft. (0.6 m) from gauge a full-time operator working a 40 hour week can expect to receive about 20 MREM's per week (gamma and neutron) or 260 MREM's (gamma and neutron) per 13 weeks for his whole body. This dose is well within the limits prescribed in NUREG-1556.

The dose to general public is zero due to the following:

1. Only certified operators wearing film badge are allowed where gauge is stored.
2. Under field conditions no one except gauge operator is allowed within 15 feet of gauge

Operating Procedures

The following list itemizes the standard operating procedure:

1. Operator(s) are required to wear a film badge when using or transporting gauge.
2. The operator must log in and log out the gauge at all times. Information such as name, project location, condition of gauge, calibration counts, etc. should be documented.
3. Keep the source in the "safe" or stored position when not in use (this includes from one test location to another).
4. While exposure dose levels are well within limits for radiation worker, never expose yourself to the bare source without sufficient justification for the additional dose.
5. Keep all unauthorized persons out of operating area. The suggested distance 15 feet.
6. Maintain security of the instrument at all times. The source lock shall be in place any time the gauge is not in use. The operator must always have visual contact of the gauge and never be more than 15 feet away from the gauge.
7. The gauge shall be kept in carrying case (shipping case - DOT 7A, Type A, Yellow 11 Transport Index) with source rod locked while in transit. It must be transported only by a certified operator in an approved vehicle. The gauge must be strapped to the vehicle.
8. The gauge while being transported in a vehicle shall be located in an area as far away from any person(s) as possible (trunk of sedan, back of station or suburban).
9. The vehicle, transporting the gauge, must be kept locked when unoccupied
10. If an accident occurs with vehicle while transporting gauge, follow conditions under Emergency Procedures.

Equipment And Licensing Information

All items listed below are to be kept with the gauge at all times:



1. Utilization Log Book and Operating and Emergency Procedures Manual – information should be recorded is as follows:
 - a. Important phone numbers in the event of malfunction or accident
 - b. Model and serial number of the Density Gauge
 - c. Date and time of day gauge is removed from and returned to storage
 - d. Name of operator and immediate supervisor
 - e. Destination of Gauge
 - f. Signature of operator
 - g. Standard counts of gauge
2. A folder containing information listed below must be readily accessible to the operator when using and transporting gauges:
 - a. Current Bill of Lading
 - b. YU & Associates, Inc Operating and Emergency Procedures Manual
 - c. Copy of materials license issued by the NRC with amendments
 - d. Personal identification
 - e. Copy of NUREG-1556 or NJAC 7:28
 - f. Notices of radioactive materials
 - g. Troxler Operation and Instruction Manual
3. Dosimeter Badge
4. Ropes, stakes, tie wires, and yellow police tape

Inventory Control

A record is kept by the RSO showing where gauges are located at all times. Every 6 months, a thorough inventory is done (this coincides with leak testing schedule) to check gauges for usage and operating condition. A leak test is administered and monitored by the RSO on a 6 month basis. The testing is done using an approved kit supplied by Troxler Electronics Laboratories. A test paper supplied with the kit shall be coated with soap solution prior to swiping the radioactive sources in the gauge. The test paper is then placed in plastic envelopes on which the following information is recorded:

1. Company name
2. Address
3. Gauge Model.
4. Gauge Serial No.
5. Source Serial No.
6. Date of test

The plastic envelope is placed in a slipping envelope along with leak test analysis form which also contains the above information which is then shipped to Troxler Electronic Laboratories, Inc. for analysis.

Emergency Procedures

- I. If an emergency occurs involving a loss of a theft of a nuclear device, the operator should follow the procedures specified in Item II (C) below.
- II. If an emergency occurs that involves physical damage to the gauge at the job site or while in transit, or the building or vehicle where the gauge is stored is subjected to fire or explosion, the operator shall follow the procedures specified in Items A through D below.

A. SECURE THE AREA AROUND THE ACCIDENT. KEEP UNAUTHORIZED PERSONS AWAY. ALERT PEOPLE IN THE VICINITY OF THE PRESENCE OF RADIOACTIVITY AND POSSIBLE ASSOCIATED HAZARDS.

B. DO NOT LEAVE THE SITE. DO NOT TOUCH OR MOVE THE GAUGE. GATHER ALL PERTINENT INFORMATION SUCH AS THE ADDRESS/LOCATION OF THE SITE, DESCRIPTION OF RADIATION INCIDENT, CONDITION/LOCATION OF THE GAUGE AND SOURCE MATERIAL, ETC. ADDITIONAL STEPS CAN BE FOUND IN THE ATTACHED TROXLER MANUAL OF OPERATION AND INSTRUCTION, APPENDIX A-12.

C. IMMEDIATELY CALL:

Radiation Safety Officer: Reynante Clavel

Work #: (201) 791-0075 ext. 135 Home #: (201)-755-9559

Local Police Contact Information: _____

Local Fire Department Contact Information: _____

D. NOTIFY THE RADIATION SAFETY OFFICER (RSO) IMMEDIATELY. The RSO must in turn immediately notify:

ii. New Jersey Department of Environmental Protection

Emergency # (Business Hours): **(609) 984-5462**

Emergency # (Off-hours and Holidays): **(877) 927-6337**

iii. United States Nuclear Regulatory Commission

Emergency #: **(301) 816-5100**

ii. New Jersey State Police

Emergency #: **(609) 882-2000**



200 Riverfront Boulevard, 2nd Floor, Elmwood Park, NJ 07407 • (201) 791-0075 • Fax: (201) 791-4533

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

APPENDIX A-12

EMERGENCY PROCEDURES

If the nuclear gauge is lost or stolen, then immediately notify the gauge owner's Radiation Safety Officer (RSO).

The gauge owner should complete the emergency contact information on the lines furnished below. (Note that *company* refers to the gauge owner's company, not Troxler Electronic Laboratories.) This information should be readily available to the gauge operator at all times.

The company RSO is Reynante Clavel

Call the RSO at 201-755-9559

The regulatory agency is NJDEP

Call the agency at (609) 984-5462

If a gauge is damaged, then follow the steps below:

- ✓ Locate the gauge and/or source.
- ✓ Do not touch or move the gauge.
- ✓ Immediately cordon off an area around the nuclear gauge and/or source. A radius of fifteen feet (5 m) will be sufficient. Do not leave the area unattended.
- ✓ Keep all unauthorized personnel from the nuclear gauge.
- ✓ If a vehicle is involved, it must be stopped until the extent of contamination, if any, can be established.
- ✓ The gauge operator should perform a visual inspection of the nuclear gauge to determine if the source housing and/or shielding has been damaged.
- ✓ Use a survey meter to measure the dose rate at a distance of three feet (1 m) from the gauge.

- ✓ Contact the company RSO (name and number given at the beginning of this section). Provide the RSO with the following:
 - ◆ The date, time, and location of the accident
 - ◆ The gauge model and serial number
 - ◆ The nature of the accident
 - ◆ The location and condition of the gauge and/or source
 - ◆ The dose rate at three feet (1 m) from the gauge.
- ✓ If you are unable to reach the RSO, then call your regulatory agency (name and number given at the beginning of this section).
- ✓ Follow the instructions of the RSO. The RSO should report the incident to the regulatory agency. The RSO may also be required to notify the U.S. DOT of accidents during transport.
- ✓ Before shipping a damaged gauge to Troxler, obtain an RGA (Returned Goods Authorization) number from the Troxler RSO as described in the *Returning the Gauge for Service* section of Appendix C.



200 Riverfront Boulevard, 2nd Floor, Elmwood Park, NJ 07407 • (201) 791-0075 • Fax: (201) 791-4533

BILL OF LADING

(For use only by employees traveling directly to and from job sites)
(Keep on top of shipping papers when in transit)

SHIPPER:

YU & Associates, Inc.
200 Riverfront Boulevard, 2nd Floor
Elmwood Park, New Jersey 07407

RQ, Radioactive material, Type A Package,
Special Form, 7, UN3332

Cs-137 0.30 GBq (8.0 mCi)
Am-241:Be 1.48 GBq (40.0 mCi)

Radioactive Yellow II Label, TI = 0.3

From: _____

To: _____

Date: _____

***** **EMERGENCY CONTACT: (201) 755-9559** *****

Shipper's Signature

Shipper's Name (Printed)



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

March 26, 2009

Docket No. 03036397
Control No. 143473

License No. 29-30837-01

Reynante Clavel
Senior Staff Engineer/Radiation Safety Officer
Yu & Associates, Inc.
200 Riverfront Boulevard (2nd Floor)
Elmwood Park, NJ 07407

SUBJECT: YU & ASSOCIATES, INC., LICENSE AMENDMENT, CONTROL NO. 143473

Dear Mr. Clavel:

This refers to your license amendment request. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5239, so that we can provide appropriate corrections and answers.

An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22(c)(14).

Current NRC regulations and guidance are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material**; then **Regulations, Guidance, and Communications**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 7:00 a.m. to 6:30 p.m. EST, Monday through Friday (except Federal holidays).

Thank you for your cooperation.

Sincerely,

Jenny Johansen
Health Physicist
Materials Security and Industrial Branch
Division of Nuclear Materials Safety

Enclosure:
Amendment No. 2

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, 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 byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p>Licensee</p> <p>1. Yu & Associates, Inc.</p> <p>2. 200 Riverfront Boulevard (2nd Floor) Elmwood Park, New Jersey 07407</p>	<p>In accordance with the letter dated February 25, 2009,</p> <p>3. License number 29-30837-01 is amended in its entirety to read as follows:</p> <p>4. Expiration date September 30, 2013</p> <p>5. Docket No. 030-36397 Reference No.</p>
<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Cesium 137</p> <p>B. Americium 241</p>	<p>7. Chemical and/or physical form</p> <p>A. Sealed Sources (Troxler Dwg. 102112)</p> <p>B. Sealed Sources (Troxler Dwg. 102451 or C-106580)</p> <p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 9 millicuries total. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State</p> <p>B. 44 millicuries total. No single source to exceed the maximum activity specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission or an Agreement State</p>
<p>9. Authorized use:</p> <p>A. and B. In Troxler Elexctronic Laboratories Model No. 3400 Series portable gauging devices for measuring physical properties of materials.</p>	

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
29-30837-01Docket or Reference Number
030-36397

Amendment No. 02

CONDITIONS

10. Licensed material may be used or stored at the licensee's facilities located at 611 River Drive, Elmwood Park, New Jersey and may be used at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material, including areas of exclusive Federal jurisdiction within Agreement States.

If the jurisdiction status of a Federal facility within an Agreement State is unknown, the licensee should contact the Federal agency controlling the job site in question to determine whether the proposed job site is an area of exclusive Federal jurisdiction. Authorization for use of radioactive materials at job sites in Agreement States not under exclusive Federal jurisdiction shall be obtained from the appropriate state regulatory agency.

11. Licensed material shall be used by, or under the supervision and in the physical presence of, individuals who have received the training described in the application dated August 6, 2003.
12. The Radiation Safety Officer for this license is Reynante Clavel.
13. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed six months or at the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State.
- B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.210 or under equivalent regulations of an Agreement State, prior to the transfer, a sealed source received from another person shall not be put into use until tested and the test results received.
- C. Sealed sources need not be tested if they are in storage and are not being used; however, when they are removed from storage for use or transferred to another person and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- D. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
29-30837-01Docket or Reference Number
030-36397

Amendment No. 02

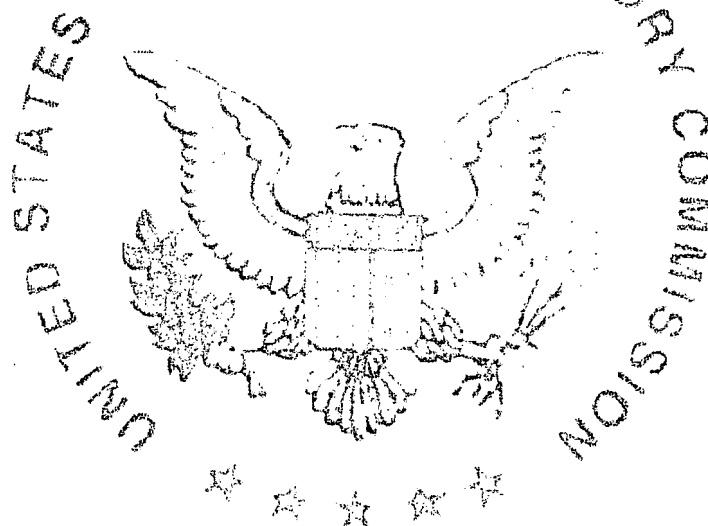
- E. Tests for leakage and/or contamination, limited to leak test sample collection, shall be performed by the licensee or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services. The licensee is not authorized to perform the analysis; analysis of leak test samples must be performed by persons specifically licensed by U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
- F. Records of leak test results shall be kept in units of microcuries and shall be maintained for 5 years.
14. Sealed sources or source rods containing licensed material shall not be opened or sources removed or detached from source rods or gauges by the licensee, except as specifically authorized.
15. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the U.S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 5 years from the date of each inventory and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.
16. Each portable nuclear 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 or storage, or when not under the direct surveillance of an authorized user.
17. Any cleaning, maintenance, or repair of the gauges that requires detaching the source or source rod from the gauge shall be performed only by the manufacturer or by other persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such services.
18. A. If the licensee uses unshielded sealed sources extended more than 3 feet below the surface, the licensee shall use surface casing that extends from the lowest depth to 12 inches above the surface and other appropriate procedures to reduce the probability of the source or probe becoming lodged below the surface. If it is not feasible to extend the casing 12 inches above the surface, the licensee shall implement procedures to ensure that the cased hole is free of obstruction before making measurements.
- B. If a sealed source or a probe containing sealed sources becomes lodged below the surface and it becomes apparent that efforts to recover the sealed source or probe may not be successful, the licensee shall notify the U.S. Nuclear Regulatory Commission and submit the report required by 10 CFR 30.50(b)(2) and (c). The licensee shall not abandon the sealed source or probe without obtaining the Commission's prior written consent.
19. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
29-30837-01Docket or Reference Number
030-36397

Amendment No. 02

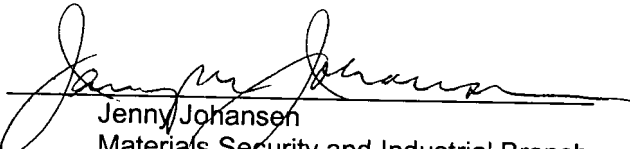
20. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- A. Application dated August 6, 2003 (ML032380212)
- B. Letter dated November 13, 2008 (ML083260135)
- C. Letter dated February 25, 2009 (ML090720885)



For the U.S. Nuclear Regulatory Commission

Date March 26, 2009 By _____


Jenny Johansen
Materials Security and Industrial Branch
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406

Thursday, March 26, 2009 14:56:10



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

April 9, 2009

Docket No. 03036397

License No. 29-30837-01

Drew Mazujian, P.E.
Project Manager and RSO
Yu & Associates, Inc.
200 Riverfront Boulevard (2nd Floor)
Elmwood Park, NJ 07407

SUBJECT: NRC INSPECTION REPORT NO. 03036397/2009001, YU & ASSOCIATES, INC., ELMWOOD PARK, NEW JERSEY SITE AND NOTICE OF VIOLATION

Dear Mr. Mazujian:

On March 27, 2009, Craig Gordon of this office conducted a safety inspection at the above address of activities authorized by the above listed NRC license. The inspection was an examination of your licensed activities as they relate to radiation safety and to compliance with the Commission's regulations and the license conditions. The inspection consisted of observations by the inspector, interviews with personnel, and a selective examination of representative records. The findings of the inspection were discussed with you at the conclusion of the inspection.

Based on the results of this inspection, it appears that your activities were not conducted in full compliance with NRC requirements. A Notice of Violation is enclosed that categorizes the violation by severity level. You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. In your response, you should document the specific actions taken and any additional actions you plan to prevent recurrence. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. After reviewing your response to this Notice, including your proposed corrective actions and the results of future inspections, the NRC will determine whether further NRC enforcement action is necessary to ensure compliance with NRC regulatory requirements.

Current NRC regulations are included on the NRC's website at www.nrc.gov; select **Nuclear Materials; Medical, Academic, and Industrial Uses of Nuclear Material**; then **Regulations, Guidance, and Communications Page**. The current Enforcement Policy is included on the NRC's website at www.nrc.gov; select **About NRC; How We Regulate; Enforcement**; then **Enforcement Policy**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-866-512-1800. The GPO is open from 7:00 a.m. to 6:30 p.m. EST, Monday through Friday (except Federal holidays).

RECEIVED

APR 16 2009

YU & ASSOCIATES

D. Mazujian

2

Please contact me at (610) 337-5205, if you have any questions regarding this matter.

Sincerely,

A handwritten signature in cursive script that reads "Marie Miller".

Marie Miller, Chief
Security and Industrial Branch
Division of Nuclear Materials Safety

Enclosure:
Notice of Violation

cc:
State of New Jersey

NOTICE OF VIOLATION

Yu & Associates, Inc.
Elmwood Park, NJ

Docket No. 03036397
License No. 29-30837-01

During an NRC inspection conducted on March 27, 2009, two violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. 10 CFR 20.1101(c) requires that the licensee periodically (at least annually) review the radiation safety program content and implementation.

Contrary to the above, as of March 27, 2009, the licensee had not reviewed the radiation protection program annually. Specifically, the licensee has not performed a periodic (at least annual) review of the radiation safety program content and implementation since 2006.

This is a Severity Level IV violation (Supplement IV).

- B. Condition 20 of NRC License No. 29-30837-01 requires, in part, that the licensee conduct its program in accordance with statements, representation, and procedures contained in the application dated August 6, 2003.

Item 10 of Appendix B to the letter dated August 6, 2003, requires that the licensee implement and maintain the operating and emergency procedures in Appendix H of NUREG 1556, Vol. 1, Rev. 1, dated November 2001, and provide copies of these procedures to all gauge users at each job site.

Contrary to the above, as of March 27, 2009, the licensee had not implemented or maintained Operating and Emergency Procedures. Specifically, the emergency procedures did not have current licensee contact information (names, phone numbers) of individuals to be notified in the event of an emergency.

This is a Severity Level IV violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Yu & Associates, Inc. is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington D.C. 20555, with a copy to the Regional Administrator, Region I, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Notice of Violation
Yu & Associates, Inc.

2

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001. Under the authority of Section 182 of the Act, 42 U.S.C. 2232, any response which contests an enforcement action shall be submitted under oath or affirmation.

Your response will be placed in the NRC Public Document Room (PDR) and on the NRC Web site. To the extent possible, it should, therefore, not include any personal privacy, proprietary, or safeguards information so that it can be made publically available without redaction. However, if you find it necessary to include such information, you should clearly indicate the specific information that you desire not to be placed in the PDR, and provide the legal basis to support your request for withholding the information from the public.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated This 09th day of April 2009