



BURGESS & NIPLE

Mr. Roland Fletcher
Maryland Department of the
Environment Radioactive Material
Licensing, Compliance & Safeguard
2500 Broening Highway
Baltimore, Maryland 21224

Re: "Notice of Violation" Response
License # MD-31-177-01

July 11, 2000

Burgess & Niple, Inc.

170 Rollins Avenue
Rockville, MD 20852
301 468.9400
Fax 301 468.9669

Dear Mr. Fletcher:

Burgess and Niple, Inc. (B&N) would like to respond to your correspondence dated June 21, 2000. The correspondence outlined three (3) separate violations to our radioactive materials license number MD-31-177-01. B&N would like to take this opportunity to outline the corrective actions taken to rectify these violations.

1. Contrary to the requirements stated in Section C.31(c), B&N failed to notify the Department in writing and submit training certificates of individuals authorized to use the Troxler gauges under our license. Each of our technicians has completed the required radiological safety training course for the use of the nuclear moisture/density gauge in accordance with Maryland State and USNRC regulations. I would like to add the following persons to our existing license as authorized users:
 - 1) Frederick King
 - 2) Juan Quispe
 - 3) Eric Dodson
 - 4) Andrew Bradshaw
 - 5) William Yakel, Jr.

I have attached copies of each person's certificate from a qualified safety training program.

2. Contrary to the requirements stated in Section D.101(c), B&N failed to conduct and document annual audits of the radiation's program content and implementation. In order to rectify this violation, an annual audit has been completed. This audit has been incorporated into our permanent records, and a copy of the audit has been included for your files.

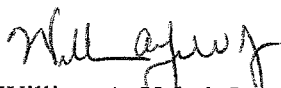
3. Contrary to the requirements stated in Sections D.801 and D.802, B&N allowed a gauge to be transported in the field when the locking mechanism for the transport case was broken (s/n 16714). In addition, one of our gauges did not have a source rod lock applied while it was being stored in our on-site facility (s/n 17427). Both of these violations have been corrected, since the inspection by Ms. Donna Gaines was performed. A new locking mechanism has been installed to the gauge transport case (s/n 16714). This mechanism enables our gauge user to effectively lock the transport case. The gauge that was lacking a source rod lock (s/n 17427) has been equipped with a padlock for the source rod.

Additionally, B&N would also like to amend the company name as listed on the license. Our existing license lists Bengston, DeBell and Elkin, LTD (BDE) as the licensee. Effective December 31, 1998, BDE merged with Burgess & Niple, Inc., operating under the name Bengtson, DeBell & Elkin, LTD, a Division of Burgess & Niple. BDE formally adopted the operating name Burgess & Niple, Inc. effective January 1, 2000. The office location and management structure has not changed. Please note this change for future license renewals.

With the corrective actions described above, B&N has sufficiently remedied the violations enumerated in your letter. As always, it is our company's intent to follow the stipulations set forth in our radioactive materials license. We look forward to working with you and your staff to insure the continued safe operation of our equipment. Should you require any additional information, feel free to contact our Rockville office.

Respectfully,

BURGESS & NIPLE, INC



William A. Yakel, Jr.
Construction Services Manager



David R. Gardy, LS, Vice President
District Director

/drl
attachments

Licensee's Name: Burgess & Niple

License No.: MD-31-177-01

Auditor: Will Yakei

Date of Audit: 6/29/00

Signature: Will Yakei

1. AUDIT HISTORY

I have been the RSO for the Rockville office since February 2000. No prior annual audits are available for review. Therefore, I am not able to determine if any deficiencies have been recorded in the past.

2. ORGANIZATION AND SCOPE OF PROGRAM

Since I started working for B&N in February, two changes were made to the existing license. First, our company name under the original license was Bengston, DeBell and Elkin, LTD (BDE). Due to BDE's acquisition by Burgess & Niple, Inc., the company name on the license needed to be changed to Burgess & Niple, Inc. Secondly, the RSO of the Rockville office changed, and the license needed to be amended accordingly. In a letters to the NRC and MDE, both of these amendments were requested. The amendments were approved by MDE and the NRC in response letters both dated February 24, 2000.

I attended an approved RSO training class in order to be fully prepared to perform my duties as the new RSO.

3. TRAINING AND INSTRUCTIONS TO WORKERS

Each gauge operator in this office has completed an approved safety training course, and records of those certifications are kept in my files. The operators recently received an updated version of the Radiation Safety Program, which they keep in their gauge transport case. Each operator signed a memo stating that they have read and understand every aspect of the program.

I have reviewed the general maintenance of the gauges. Routine cleaning and lubrication has been performed. Gauge transport and storing is consistent with the requirements stated in the license.

I will need to perform field reviews of the operators of the gauges in the near future. In addition, I need to look into whether or not HAZMAT training is required in the state of Maryland.

4. RADIATION SURVEY INSTRUMENTS

The Rockville office has access to a survey meter in case of suspected radiation leakage. In case of emergency, I will be able to obtain the survey meter. I am not aware of the frequency of the meter calibration, and whether or not records are kept.

5. GAUGE INVENTORY

Gauge inventories have been maintained and documented by means of a Sign In/Out Log, which is kept daily in our storage facility. I have retained copies of the Bill of Ladings for each gauge in our possession, which contain the serial number and radiation sources of that particular gauge.

6. PERSONNEL RADIATION PROTECTION

ALARA considerations were incorporated into the positioning of the nuclear gauge storage closet within our office. The closet does not come in contact with any personnel offices or work areas. The only area where unmonitored users come close to the storage closet is the employee kitchen area. During our surprise inspection by MDE on June 9, 2000, the kitchen area was surveyed by Ms. Donna Gaines, and no measurable radiation was observed.

The gauge users are provided with dosimeters, which are replaced quarterly. The records of the dosimetry reports are kept in my office, and are readily accessible to the users upon request.

7. PUBLIC DOSE

I have discussed the safety precautions taken in choosing our storage closet for the nuclear gauges. This type of storage keeps the public doses below maximum allowable levels. No changes have been made to the storage facility within the last year. This review serves to document the radiation survey performed by Ms. Donna Gaines of MDE on June 9, 2000.

The gauges are stored in a locked storage closet, which can only be accessed by authorized gauge users. The gauge cases are locked within the closet and the source rods are locked, if possible. Two of our gauges have source rods that cannot be locked because the plastic handle covers the hole that the padlock goes through.

8. OPERATING AND EMERGENCY PROCEDURES

An updated Radiation Safety Program was devised and handed out to each authorized gauge user. The Program includes all of the required safety and emergency procedures. The operator is to keep a copy of the Program within the gauge case at all times.

No emergencies have occurred within the past year to the best of my knowledge.

9. LEAK TESTS

Leak tests are performed on each gauge as required in the license. At present, each gauge has been successfully leak tested within the last six months. The results of these tests are kept and filed in my office.

I will try to coordinate the leak tests of all gauges, so that they are tested at the same times each year. Presently, the testing is not coordinated; however, they are up to date.

10. MAINTENANCE OF GAUGES

Our authorized users perform routine cleaning and lubrication; however the source rod is never detached during such cleaning. Any non-routine maintenance is performed by approved Troxler personnel.

11. TRANSPORTATION

I have reviewed the condition of the transport cases for the nuclear gauges. The cases are properly marked (radioactive labels) and contain the necessary shipping documents (Bill of Lading,

Radiation Safety Program, and most recent Leak Test data). One gauge case has a faded outer label that will be replaced before the next audit.

Each gauge is transported in company trucks that have a Bill of Lading within arm's reach of the driver. The trucks are equipped with hooks on the bed, which allows the gauge to be chained to the truck. This prevents the gauge from moving about the truck, and it provides another line of security.

No incidents have occurred with the gauges during transport that would require notifying DOT. I can personally verify this fact since Feb. 2000. I had conversations with the office manager to verify that no other incidents were reported before February 2000.

12. AUDITOR'S INDEPENDENT SURVEY MEASUREMENT

No survey was performed independently. It was not necessary, since a survey was performed by the MDE inspector on June 9, 2000.

13. NOTIFICATION AND REPORTS

No reportable incidents have occurred. Dosimetry reports were all within the allowable range, and no radioactive materials were lost or stolen.

14. POSTING AND LABELING

The NRC's "Notice to Workers" label is posted outside of the storage closet. The license documents are found within the nuclear gauge transport containers. In addition, the RSO phone numbers are posted on the storage closet door in case of emergency. The required radioactive materials label is also posted on the outside door to the storage closet.

15. DEFICIENCIES IDENTIFIED IN AUDIT

Three minor deficiencies were noted throughout the audit. They are as follows:

- 1) I need to find out whether or not HAZMAT training is required for the transporters of the nuclear gauges.
- 2) No previous annual audits were available. The trend must begin here and continue years into the future.
- 3) I need to verify the availability of the survey meter for emergencies. I was assured by the Dulles office that is available; however, I need to confirm that, and make sure I am able to operate it.

16. EVALUATION OF OTHER FACTORS

The management of this office gives me the support, time and authority to perform my RSO duties. At the present time, I can manage the four nuclear gauges and users without much assistance from other personnel. In the event that more gauges are purchased and/or more users are employed, I may need to garner support from other personnel.



HUMBOLDT SCIENTIFIC, INC.
Nuclear Gauge Training Certification

Juan C. Quispe


**HAS SUCCESSFULLY COMPLETED A CERTIFIED COURSE ON RADIATION
SAFETY, TRANSPORT AND OPERATION OF INSTRUMENTS USING
GAMMA AND NEUTRON RADIATION TO MEASURE THE
PHYSICAL PROPERTIES OF CONSTRUCTION MATERIALS**

Subjects included were:

Types and basic unit of ionizing radiation.
Calculations related to radiation safety.
Biological effects of radiation.
Methods of protection.
Leak testing procedures.
Procedures for safe transport and storage.
Federal and State Regulations.

Accident prevention and procedures.
Instrument theory and operation.
Limitations of field maintenance.
Instrument standardization and calibration.
Test site selection and preparation.
Field operation and calculations.
Types and reasons for measurement errors.

Date of Training: **June 21, 1999**
Location: **Columbia, MD**
Certificate Number: **1864**



Instructor: **Keith Earnshaw**
Humboldt Scientific, Inc.
551-D Pylon Drive
Raleigh, NC 27606

OCHS' Technical Services

HEREBY CERTIFIES THAT

Andrew Bradshaw

HAS SUCCESSFULLY COMPLETED THE REQUIRED RADIOLOGICAL SAFETY TRAINING FOR USE OF THE NUCLEAR MOISTURE-DENSITY GAUGE IN ACCORDANCE WITH MD STATE AND USNRC REGULATIONS

Subjects included in this course were as follows: Radiological Safety - principles and practices of radiation protection; leak testing procedures; measurements of radioactivity; biological effects of radiation; monitoring techniques and methods; accident, incident, storage, and transportation procedures; and general safety precautions. Device Operation - instrument theory, operation procedures, leak testing, field operations and gauge calibration.

Woodrow R. Helenburg, P.E.

Instructor

June 10, 2000

Date of Training

Lic. No. MD-05-137-01
NC Reg. No. S 000480

TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

ERIC DODDSON

of

PROFESSIONAL CONSULTING GROUP

HAS SUCCESSFULLY COMPLETED THE TROXLER ELECTRONIC LABORATORIES, INC. TRAINING COURSE FOR THE USE OF NUCLEAR TESTING EQUIPMENT.

SUBJECTS INCLUDED IN THIS COURSE WERE AS FOLLOWS:

Radiological Safety

1. Principles and practices of radiation protection.
 2. Leak testing procedures.
 3. Mathematics and calculations basic to the use and measurement of radioactivity.
 4. Biological effects of radiation.
 5. Radioactivity measurement standardization and monitoring techniques and instruments.
 6. Accident and incident procedures.
 7. Procedures for nuclear gauge storage and transportation.
 8. General safety precautions.
- Gauge Operation
1. Instrument theory
 2. Operating procedures
 3. Maintenance
 4. Field application
- Certificate # : 86383

George Marshall Hall
INSTRUCTOR

4/28/99
DATE

William F. Troxler
PRESIDENT

OCHS' Technical Services

HEREBY CERTIFIES THAT

William A. Pakel, Jr.

HAS SUCCESSFULLY COMPLETED THE REQUIRED RADIOLOGICAL SAFETY TRAINING FOR USE OF THE NUCLEAR MOISTURE-DENSITY GAUGE IN ACCORDANCE WITH MD STATE AND USNRC REGULATIONS

Subjects included in this course were as follows: Radiological Safety - principles and practices of radiation protection; leak testing procedures; measurements of radioactivity; biological effects of radiation; monitoring techniques and methods; accident, incident, storage, and transportation procedures; and general safety precautions. Device Operation - instrument theory, operation procedures, leak testing, field operations and gauge calibration.

February 17, 1996
Date of Training

William D. Ochs
Instructor

Lic. No. MD-05-137-01

OCHS' Technical Services

HEREBY CERTIFIES THAT

Frederick D. King II

HAS SUCCESSFULLY COMPLETED THE REQUIRED RADIOLOGICAL SAFETY TRAINING FOR USE OF THE NUCLEAR MOISTURE-DENSITY GAUGE IN ACCORDANCE WITH MD STATE AND USNRC REGULATIONS

Subjects included in this course were as follows: Radiological Safety - principles and practices of radiation protection; leak testing procedures; measurements of radioactivity; biological effects of radiation; monitoring techniques and methods; accident, incident, storage, and transportation procedures; and general safety precautions. Device Operation - instrument theory, operation procedures, leak testing, field operations and gauge calibration.

William D. Ochs, C.E.T.

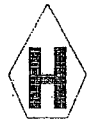
Instructor

September 19, 1998

Date of Training

Lic. No. MD-05-137-01

NC Reg. No. S 000480



HUMBOLDT SCIENTIFIC, INC.

RSO Certification

William Yakel, Jr.

HAS SUCCESSFULLY COMPLETED A CERTIFIED
RADIATION SAFETY OFFICER COURSE

Subjects included were:

RSO Duties and Responsibilities

Radiation Safety Practices

Regulatory Requirements

Dose/Shielding Requirements

Accidents/Storage

Regulatory Guidance (NUREG-1556, Vol. 1)

Transportation/HAZMAT Requirements

Risk

ALARA

Radiation Measurement

Operating and Emergency Procedures

Calibration and Maintenance

Record Keeping

Date of Training: **April 11, 2000**

Location: **Columbia, MD**

Certificate Number: **2506**

HAZMAT Expiration Date: **April 11, 2003**


Instructor: Keith Earnshaw

Humboldt Scientific, Inc.

551-D Pylon Drive

Raleigh, NC 27606



BURGESS & NIPLE

BILL OF LADING
RADIOACTIVE MATERIALS
SPECIAL FORM, N.O.S., UN2974

Burgess & Niple, Inc.
170 Rollins Avenue
Rockville, MD 20852
301 468.9400
Fax 301 468.9669

Cesium - 137	10 mci
RQ - Americium - 241:Be	50 mci

TYPE A PACKAGE
RADIOACTIVE YELLOW II
TRANSPORT INDEX 0.6

MACHINE NO. _____

SERIAL NO. _____

IN CASE OF EMERGENCY, CONTACT THE RADIATION SAFETY OFFICER:

William Yakel, Jr.

(301) 468-9400
Phone Number (Daytime)

(301) 515-2891
Phone Number (Night)