

MUNICIPALITY OF ANCHORAGE



Project Management and Engineering
4700 Elmore Road

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Mayor Ethan Berkowitz

September 13, 2019

Jason vonEhr
Health Physicist
U.S. Nuclear Regulatory Commission, Region-IV
1600 East Lamar Boulevard
Arlington, Texas 76011-4511

Dear Mr. vonEhr:

(via email)

Re: NRC Inspection Response Items

I apologize for not responding to your email dated Thursday September 5, 2019 sooner. I assumed supervisory responsibilities over the geotechnical lab group on Monday of this week and have been playing catch-up. Tim Huntting is still in charge of the lab and the daily activities; I am the new next layer of management.

Attached please find responses to the concerns that you raised during your August 29, 2019 inspection of our facilities. As you will note, there are several areas where our processes are not current, and we are still attempting to finalize verification of our certifications. In the responses we have provided both a plan for remedy and the date by which those remedies will be accomplished.

There was some discontinuity in lab management between Mr. Krueger's unexpected departure and when Tim was hired. Tim has been picking up the pieces and getting the lab back up to speed since we hired him last year. Moving forward we will ensure that the license requirements are met and the responsibilities are better documented so that processes are followed through future staff changes.

Please let us know if you have additional questions or need additional information.

Sincerely,

A handwritten signature in blue ink that reads "Glenda JC Radvansky".

Glenda JC Radvansky, P.E.
Acting Engineering Manager

cc: Kent Kohlhase, Director
Tim Huntting, P.E., Geotechnical Lab Manager
Russ Oswald, P.E., Project Manager

No.	Item	Violation	Status	Results or Plan to Resolve
1.	3-year DOT Hazmat refresher training for Austin Lavy	Current certificate not on file.	<p>Most recent certificate on file is dated May 16, 2014 and expired on May 15, 2017.</p> <p>Have contacted AK DOT Central Region RSO (trainer for previous certificates), who believes that Mr. Lavy went through refresher training. They are currently are on field assignment and do not have access to training records on file in their office. There is still a possibility that training is not current.</p>	<p>The AK DOT RO will be in their office on Monday, September 16, 2019 and assuming a current certificate for Mr. Lavy exists, will forward a copy to MOA.</p> <p>If a current certificate cannot be obtained by September 17, 2019, Mr. Lavy will enroll in an online refresher class, to be completed by September 23, 2019.</p> <p>A current certificate will be forwarded to the NRC upon receipt.</p>
2.	3-year DOT Hazmat refresher training for Jamie Smykalksi	Current certificate not on file.	<p>Most recent certificate on file is dated April 6, 2015 and expired on April 5, 2018.</p> <p>On September 12, 2019, received a current certificate from APNGA. A copy of certificate dated May 31, 2018 is attached.</p>	Action completed. Hard copy placed in RSO certificates file.
3.	Mike Krueger status as RSO	Mr. Krueger is listed on the license as the RSO but is longer employed by MOA.	Mr. Krueger had surgery for a heart condition on April 13, 2017. Was on leave and intended to return to work when physically able. Complications during recovery extended leave beyond expectations. Mr. Krueger chose to retire from MOA on September 30, 2017 after expending his allotted paid leave.	<p>Although on leave. Mr. Krueger was still employed by the MOA and remained as the official RSO during this period.</p> <p>No action possible.</p>
4.	Interim/Acting RSO	License stipulates that an RSO is required.	During Mr. Krueger's physical absence from the lab, Austin Lavy performed the routine RSO tasks to continue the radiation safety program, following policies and procedures established by Mr. Krueger. All tasks that required being in physical contact or near the nuclear gauges were performed by Mr. Lavy or Mr. Smykalski. Mr. Lavy maintained the dosimetry monitoring and was responsible for having annual leak tests performed. Some tasks, such as completing the semi-annual inventory and annual audit were overlooked or were not documented.	<p>Because it was always expected that Mr. Krueger would be able to return to active status soon, no actions were taken to replace him as the official RSO.</p> <p>Due to a lack of training and experience, and because Mr. Lavy could act as the RSO, no actions were taken by Mr. Oswald that could be construed as acting as the RSO.</p> <p>Because the new Geotechnical Lab Manager position description included being the RSO, and expecting that the</p>

4.			<p>After Mr. Krueger retired Mr. Lavy completed a Radiation Safety Officer course and received a certificate dated January 26, 2018, a copy of which is attached.</p> <p>During Mr. Krueger's absence and until Mr. Huntting was hired on May 7, 2018, Mr. Lavy was also tasked with the daily, routine management of the soils/materials analysis lab. Russell Oswald assumed lab administrative responsibilities, such as personnel supervisor (timecards, leave requests), vendor contracts, processing invoices, authorizing capital expenditures (if any), etc. for the lab during this same period. Mr. Oswald relied upon Mr. Lavy to bring to his attention duties/tasks for which Mr. Lavy was unqualified, including those associated with the nuclear safety program. Mr. Oswald served as the lab liaison and because nothing out of the ordinary occurred during this period, his actual involvement in the nuclear safety program was minimal.</p> <p>Mr. Lavy continued his duties as the acting RSO up until Mr. Huntting was hired. However, considering Mr. Huntting's unfamiliarity with lab operations and lack of current training, Mr. Lavy continued to perform tasks that required handling of the nuclear gauges.</p>	<p>position would be filled soon, no actions were taken to make Mr. Lavy the official RSO on the license.</p> <p>The plan to amend the license is addressed in Item No. 5.</p>
5.	Tim Huntting status as future RSO	The RSO needs to be qualified and approved by the NRC. An application to amend license reflecting the change needs to be submitted.	<p>Mr. Huntting began employment with MOA on May 7, 2018 as the Geotechnical Lab Manager, ending Mr. Oswald's involvement in the lab.</p> <p>Recognizing the importance of the nuclear safety program and the general need to update the license, Mr. Huntting undertook a comprehensive review of the radiation safety files to determine program requirements and the status of program elements. First items that were addressed were dosimetry monitoring and operator qualifications because they were deemed to be most important for protecting</p>	<p>Mr. Huntting will complete the Nuclear Gauge Safety Certification and the RSO training by September 30, 2019.</p> <p>The MOA will apply to amend the license reflecting the change in the RSO and any other proposed modifications to existing stipulations to the NRC by October 18, 2019.</p> <p>The MOA will complete all required annual and semi-annual activities related</p>

5.		<p>gauge operators and the public. Mr. Huntting performed additional tasks, including verifying inventory and that security measures were in place, checking exposure levels, going through audit procedures etc. as he identified them working through the files. However, Mr. Huntting did not record and properly document most of these activities.</p> <p>Mr. Huntting completed his Radiation Safety and Use of Nuclear Soil Gauges on July 15, 1987. A copy of his certificate along with the course outline from CPN Corporation is attached. Also attached is Statement of Training and Experience dated February 8(?), 1988. Mr. Huntting has had some refresher training, the latest being in 2006 or 2007 but does not have a certificate nor did it cover all the criteria in 49 CFR 172 Subpart H.</p> <p>Mr. Huntting has had training that is similar: OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER), 29 CFR 1910 Subpart H. He completed the original 40-hour course in 1989, took the 8-hour HAZWOPER Supervisor course in 1991, completed the 8-hour refresher trainings annually through 2000, and retok the 40-hour course in 2006 (or possibly in 2005). Mr. Huntting has certificates for all these courses, but they are currently in storage in Kirkland, Washington.</p> <p>On January 2, 2019, Mr. Huntting registered for the following online courses from APNGA:</p> <ul style="list-style-type: none"> • Nuclear Gauge Safety Certification • US DOT HAZMAT Refresher • Annual Employee Nuclear Gauge Refresher • Do-It-Yourself Annual Audit • Radiation Safety Officer (RSO) <p>A copy of the receipt is attached. Mr. Huntting has currently not completed any of the examinations.</p>	<p>to the nuclear soil gauge program (leak test, inventory verification, audit) by December 31, 2019.</p>
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6.	Usage Log	A Usage Log was not being maintained.	Although there are different methods for tracking the locations of gauges when not in their designated storage location, in 2011, Mr. Krueger committed to implementing the “Operating, Emergency and Security Procedures” described in the errata sheet to Appendix H of NUREG-1556, Volume 1, Revision 1. Those procedures include maintaining a Usage Log.	Action completed. Austin Lavy developed a usage log form that will be kept in a dedicated notebook and stored in or on the nuclear gauge storage cabinet.
7.	Form 3	The posted version of the “Notice to Employees”, NRC Form 3, is out of date	The ones in use are dated 2012, the current one is dated 2017.	Action partially complete. Current Form 3 was downloaded from the NRC website and posted. Still need to purge extraneous copies of old version from files. File review will be completed by September 30, 2019.
8.	Shipping Papers	Shipping Papers in use are out of date.	The UN number on the Shipping Paper accompanying the nuclear soil gauge assigned to Austin Lavy is no longer valid and has been replaced and SI units are now standard.	Action partially complete. Austin Lavy made the corrections to his (laminated) Shipping Paper with a Sharpie. Still need to generate new, permanent shipping papers for all gauges and purge extraneous copies of old version from files. New shipping papers will be created, and the file review will be completed by September 30, 2019.

APNGA Portable Nuclear Gauge Safety & U.S. D.O.T. Hazmat Certification Class

Certificate of Completion to:

Jamie Smykalski

HAZMAT refresher training is required within 3 years after today's date:

May 31, 2018

This course covers training criteria of NUREG 1556, The Agreement States, and 49 CFR 172, Subpart H.

The Company RSO completes the training requirements by familiarizing the employee with:

- State specific regulations including introduction to the state regulatory website
- The company radiation safety program, specifically gauge safety operating and emergency procedures
- A tour of storage area with emphasis on security, documents and postings
- Loading, security and transporting gauges in company vehicles
- Hands-on training with the gauge and methods in use by the company
- Introduction to gauge safety content on gauge manufacturer website
- Certificate covers both Gauge Safety and USDOT HAZMAT requirements

The acknowledgement and signature of the RSO/Official makes the training and certificate relevant and valid.

Company Name

Signature of RSO

Director of APNGA

American Portable Nuclear Gauge Association
P.O. Box 423, Emmitsburg, MD 21727 • www.apnga.com

y48vDXZbpy

George E. Marshall - Director
240-888-6426

Certificate ID: 2FECC711AABF891

Radiation Safety Officer Certification

This certifies that

Austin Lavy

has successfully completed the official Troxler Radiation Safety Officer Course. This person was taught and demonstrated knowledge of radiation safety and the regulatory requirements associated with the role of Radiation Safety Officer for a portable nuclear gauge license on this date:

Jan 26, 2018



Troxler Electronic Laboratories, Inc.

P.O. BOX 12057 - 3008 E. Cornwallis Road - Research Triangle Park, NC 27709

Phone: (919) 549-8661 - Fax: (919) 549-0761 - www.troxlerlabs.com

No. 9898

Certificate of Completion

This is to certify that TIM HUNTING has completed the
basic training course on Radiation Safety and Use of Nuclear Soil Gauges,
held this 15TH day of JULY, 19 87, held at CPN CORPORATION
City of MARTINEZ State of CALIFORNIA by CPN Corporation.


DAVID R. HART
INSTRUCTOR



CORPORATION
2830 Howe Road
Martinez, California USA 94553



WILLIAM MANCUSO
RADIATION SAFETY OFFICER

CONTENTS OF COURSE

PRINCIPLES AND PRACTICES OF RADIATION PROTECTION

Theory, terminology, and practical explanations of Radioactive Materials, License requirements, Storage, Transportation, and Emergency Procedures to be used with portable nuclear devices typical of "soil, agricultural, roof, and other construction gauges" using small (not more than 300 millicurie) sources in sealed capsules.

RADIOACTIVITY MEASUREMENT STANDARDIZATION AND MONITORING TECHNIQUES AND INSTRUMENTS

Demonstration of radiation levels typical with use of small, portable devices using conventional survey meter. Concentration on Inverse Squares Law factors, effects of shielding, time, and distance in use of materials.

MATHEMATICS AND CALCULATIONS BASIC TO THE USE AND MEASUREMENT OF RADIOACTIVITY

Determination of typical radiation levels in mrems within working distance of a typical portable "construction device", calculation of probable weekly radiation dose under a heavy work condition, and relation of that dose to the NRC maximum annual allowances for occupational use of radioactivity.

Establishment of relationship of this occupational dose to that obtained from normal life exposures of external radiation at sea level and high elevations, jet plane travel, normal health XRAYs, etc.

BIOLOGICAL EFFECTS OF RADIATION

General discussion of effects of low level radiation on the body with emphasis on the relationship of routine lifestyle exposure (environmental, routine medical, smoking, etc) to the added exposure from normal use of portable devices using small millicurie sources.

Retain a copy of this document for review by the appropriate regulatory agency for proof of training.



CPN

CORPORATION

2830 Howe Road
Martinez, California 94553
415 228-9770
Telex: 17-1289 CPN-UD

CPN TRAINING CLASS OUTLINE

1. INTRODUCTION

Two-part class: 1. Safe and legal use of radioactive materials
2. Nuclear gauge operation

Overview of CPN products and applications

Introduction of the training manual

2. RADIATION PRINCIPLES

Basic terms

Types of Radiation: Gamma and Neutron

Principles of Measurement: Density and Moisture

3. RADIATION SAFETY

Useful terms

Units of Measurement, Dose limits, Dose calculations, ALARA, other exposures.

4. NRC and AGGREMENT STATE REGULATIONS

License requirements

Radiation Safety Officer

Safety Program

Storage

Transportation

Security

Disposal

Record keeping

Accidents

Leak tests

5. HOW GAUGES WORK

- A. Density Measurement by Gamma Attenuation
 - Backscatter and transmission: parameters of measurement
 - Applications to pavement and soil testing
- B. Moisture (and %AC) Measurement by Neutron Moderation
 - Parameters of measurement
 - Applications to soil moisture and %AC measurement

6. APPLICATIONS

A. Construction

1. Soils

- | | |
|--------------------------|------------------------------|
| Test preparation | Over-size rock correction |
| Statistical control | Compaction box verification |
| Laboratory tests | ASTM and agency test methods |
| Trench back-fill testing | |

2. Pavements

- | | |
|--------------------|------------------------------|
| Test preparation | Roller evaluation |
| BS and AC | Core correlation |
| Thin-lift overlays | Laboratory tests |
| Test strip | ASTM and agency test methods |

B. Agriculture

Site preparation, irrigation scheduling concepts

C. Other

Roof moisture surveys, research, measurement of other materials

7. CALIBRATION

Calibration standards: density and moisture

Use of standard count and count ratio

8. TESTING STATISTICS

The normal curve: analyzing a standard count series
Precision: how time of test and type of test relate

9. QUIZ (and Standard Count Accumulation)

25 Multiple-choice questions
Complete Standard Count Evaluation

10. FIELD TESTING (at a facility where outside testing is not feasible)

Simulated backscatter and transmission testing
Using hypothetical values, complete Student Worksheet

11. SERVICE AND MAINTENANCE

Dismantle demonstration gauges and view major components
Batteries: charging and replacement
Shutter mechanism: cleaning
Electronic stack: exchange

12. FIELD PRACTICE (at CPN facility)

Field testing in small groups led by CPN personnel

STATEMENT OF TRAINING AND EXPERIENCE

(Use additional sheets as necessary)

Instruction: Every individual proposing to use radioactive material is required to submit a Statement of Training and Experience in duplicate to the address given above. Physicians should request Form RH 2000 A when applying for human use authorizations.

1. Name of proposed user: TIMOTHY D HUNTING Position title: STAFF ENGINEER
Address: 4750 NERRAS CANYON BLVD - A City: SAN RAMON Zip: 94583
To be included on Lic. No. _____ in name of _____

2. Description of proposed use
ENCAPSULATED SOURCE IN SOIL GAUGES FOR SOIL MOISTURE AND SOIL DENSITY DETERMINATIONS

3. Training:

- a. High School Graduate: Yes No
- b. College or University: Name and location COREGON STATE UNIVERSITY CORVALLIS, UNIVERSITY OF WASHINGTON SEATTLE
Years completed 8 Degree BS Course of study CIVIL ENGINEERING
- c. Education specifically applicable to use of radioactive material
BASIC TRAINING COURSE ON RADIATION SAFETY AND USE OF NUCLEAR SOIL GAUGES BY CPN CORPORATION, JULY 1987

4. Experience:

- a. List experience with radioactivity beginning with most recent
 - (1) Dates: From JUNE 1987 to PRESENT
Title and duties: STAFF ENGINEER OBSERVATION AND TESTING OF SOIL SOIL INVESTIGATION
Employer: KLEINFELDER Address: SAME AS IN 1
 - (2) Dates: From N/A to _____
Title and duties: _____
Employer: _____ Address: _____
 - (3) Dates: From N/A to _____
Title and duties: _____
Employer: _____ Address: _____

- b. Radioactive materials previously used. Cite typical radioisotopes in appropriate box and key to Part 4.a above:

Quantities Handled

	Microcuries	Millicuries	Curies	Kilocuries
Sealed sources		10 CESIUM 137 50 AMERICIUM 241		
Unsealed alpha emitters	N/A			
Unsealed beta-gamma emitters	N/A			
Neutron sources	N/A			

- c. Describe procedures similar to those proposed in Part 2 with which you have had experience. Indicate months or years for each and key to Part 4.a above.

NONE

- d. Indicate which types of facilities you have used and key to Part 4.a.

- () Ordinary Chemical laboratories
- () "Controlled Area" (Type B) laboratories
- () Glove boxes
- () Shielded glove boxes
- () Caves with remote manipulators
- (x) Field operations with portable equipment

5. Certificate:

I hereby certify that all information contained in this Statement is true and correct.


FEB 2, 1968

 Signature of proposed user Date

Huntting, Timothy D.

From: APNGA LLC Transaction Processing <noreply@itransact.com>
Sent: Wednesday, January 2, 2019 7:18 AM
To: Huntting, Timothy D.
Subject: Sale confirmation with APNGA LLC on XID 73280620

Jan 2 2019 at 9:17 AM

XID: 73280620

\$49.00

Sale at APNGA LLC

Timothy Huntting,

Thank you! The following transaction was processed.

*This email will serve as your receipt. For questions, please contact
presidio554@aol.com.*

- APNGA LLC

ITEM	PRICE
Multi-Class Registration (Receive Access to All Classes)	\$49.00 (1 x \$49.00)
Total	\$49.00

TRANSACTION DETAILS

Timothy Huntting
timothy.huntting@anchorageak.gov
1(907)343-8153

MasterCard - (K)
**** * 5135