From:

Ullrich, Elizabeth

To:

R1LAT RESOURCE FW: License Application

Subject: Date:

Tuesday, June 04, 2019 1:19:04 PM

Attachments:

External Sender License Application.msg

Br.2 (3H-35552-01) - 35552 03039179 03121

Please open a new licensing action for Geotechnical Consultants Inc. using the attached letter and email.

Please also add this email to the package. This documents that the applicant discussed his need for an NRC license both with Region 1 and Region 3, and it was decided that Region 1 would process the application because the only location of use/storage would be in Region 1. Records and the official mailing address are in Ohio, but Region 3 felt it would be better for Region 1 to do the licensing because we will be doing the inspection.

The letter and email, and this email, all are: public, non-sensitive, normal release date.

Thanks, Betsy

Betsy Ullrich, Senior Health Physicist USNRC Region I 2100 Renaissance Boulevard, Suite 100 King of Prussia, PA 19406 610-337-5040 (office) 240-704-4575 (cell) Elizabeth.ullrich@nrc.gov

> 612421 MMSC/RGNI MATERIALS-002

Beck in LAT-06/04/2019

From:

Dave Svoboda

To:

Ullrich, Elizabeth

Subject: Date: [External\_Sender] License Application Tuesday, June 04, 2019 11:13:53 AM

Attachments:

NRC 20190604102705.pdf

### Elizabeth,

As you know from our telephone conversation earlier this morning, Geotechnical Consultants, Inc. would like to apply for a material license with the NRC.

Attached are forms 313 (appendices A & B), a copy of our Ohio Material License, my original safety certification, and my RSO certification.

I forgot to ask, how much does the license cost annually and how long is it good for before renewal is required?

Thank you and let me know if you need anything else.

David A. Svoboda Field Services Supervisor Radiation Safety Officer (RSO)

Geotechnical Consultants, Inc. 720 Greencrest Dr. Westerville, OH 43081

Main: (614) 895-1400; Fax: (614) 895-1171

Direct: (614) 839-1270

dsvoboda@gci2000.com; www.gci2000.com

### Providing our clients value in geotechnical, environmental and construction monitoring services since 1979.

This communication and attachments are intended only for the person to whom it is addressed and may contain confidential and/or privileged material that is the exclusive property of Geotechnical Consultants, Inc. It is being sent to you as a convenience and may not have passed through our standard review process. Design data and recommendations included herein may be subject to alteration. If you are not the intended recipient of this communication or received it in error, you are hereby notified that any use, review, retransmission, dissemination, distribution, reproduction or any action taken in reliance upon this message is prohibited. Also please contact the sender and delete the material from any of your computers. Any views expressed in this message are those of the individual sender and may not necessarily reflect the views of Geotechnical Consultants, Inc.

U.S. Nuclear Regulatory Commission Form 313

Please use the most current version of this form, which may be found at: <a href="http://www.nrc.gov/reading-rm/doc-collections/forms/">http://www.nrc.gov/reading-rm/doc-collections/forms/</a>

NRC FORM 313	U.S. NUCLEAR REGULATORY COMMISSION	
(10-2018) 10 CFR 30, 32, 33, 34 35, 36, 37, 30, and 40	CON ICATION FOR MATERIALS	Estimated bunden per response to comply with this manufatory collection respect 4.3 hours. Submitted of the application is recoverage to determine that the applicant is qualified and that indequate perceivers made to protect the public health and believ. Send comment regarding burden estimate to the FOAL Princip, and information Collections Bearch (T.S. FSS), U.S. Nuclear Regulatory Commission, Washington, DC 2055S-0001, as in internal a result in Information Collections Bearch (T.S. FSS), U.S. Nuclear Regulatory Commission, Washington, DC 2055S-0001, as in internal a result in Information Collection Security (T.S. Policies Collection Collec
	APPLICATION FOR MATERIALS LICENSE	or by intermet 4-mail to Inducations-Recoverce@mer gars, and to the Dest Officer, Office of Information and Regulatory Affers, NEC94-10202, (3150-0120), Office of Monagement and Budget, Weshington, OC 20503. If the means used to impose an information collection does not display a currently valid OME control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.
SEND TWO COPIL	ES OF THE ENTIRE COMPLETED APPLICATION T	N GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION.  TO THE NRC OFFICE SPECIFIED BELOW. "AMENDMENTS/RENEWALS  IEW OR HIGHER FEE CATEGORY WILL REQUIRE A FEE.
1	ETRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH	E YOU ARE LOCATED BE
DIVISION OF MATE OFFICE OF NUCLE U.S. NUCLEAR RE WASHINGTON, DO		MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY COMMISSION, REGION III 2449 WARRENVILLE ROAD, SUITE 210
IF YOU ARE LOCATED	8 FRLE APPLICATIONS AS FOLL(ANS: D WIL	USLE, IL 8002-4352
ALABANA, COMMECTI KENTUCKY, MANGE, M NEW YORK, MORTH C. CAROLINA, TEMMESSI	NCUT, DELAWINGE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA AARYLAND, MASSACHASETTS, NEW HAMPSHINE, BEW JERSEY, KARCLIMA, PENISYLVAMIA, PUERTO RICC, RYDGE SLAMD, SCU EE, VERBIONT, WISCHINA, VERGIN ISLANDS, OR WEST VIRGINIA,	K, LOUISIAMA, MESSISSIPPI, INCHTANA, NEBRASIKA, NEVADA, KEWIMEZICO, MORTHI DAKOTA, UKLANGMA, OREGOR, PACIFIC TRUST TEROSTORIES, SOUTH DAKISTA, TEXAS, LITAA, WASHINISTON, OR WYONIMIS,
SEND APPLICATIONS		SEND APPLICATIONS TO:
U.S. NUCLEAR RE 2100 RENAISSANC NUNG OF PRUSSIA	ALEAR MATERIALS SAFETY EGULATORY COMMISSION, REGION I CE BOULEVARD, SUITE 100 A, PA. 10408-2713	NUCLEAR MATERIALS LICENSING BRANCH U.S. NUCLEAR REGULATORY CORRESSION, REGION IV 1809 E. LAMAR BOULEVARD ARLINGTON, TX 78011-4611
WISH TO POSSE	SS AND USE LICENSED MATERIAL IN STATES S	ONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY SUBJECT TO U.S.NUCLEAR REGULATORY COMMISSION JURISDICTIONS.
	ATRON FOR (Check appropriate flem)	Z. NAME AND MAILING ADDRESS OF APPLICANT (Include ZIP code)
A NEW UCE	ENSE	Greatenrical Consultants, Inc.
B. AMENON	MENT TO DOENGE NUMBER	720 Green Crest Drive
C RENEWA	AL OF LICENSE NUMBER	- westerville, of 43051
3. ADDRESS WHERE L	UCENSED MATERIAL WALL BE USED OR POSSESSED	4. NAME OF FERSON TO BE CONTACTED ABOUT THIS APPLICATION
116 Ca	reians laus	David A. Svoboda
	rriage Laux anys, wr 26170	6USINESS TELEPHONE NUMBER  (GH) 8:39-1:270 (614) 419-5017
	A. Pickeus	dsverbeda@qci2000.com
SUBMIT ITEMS 5 THRO	AUGH 11 ON 6-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFOR	RIMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.
5. RADIOACTIVE MATE		PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED:
	s number; b. chemical and/or physical form; and c. makemum: amount, especial arany one time.	<ol> <li>INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.</li> </ol>
B. TRAINING FOR INDIA	VIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.	0. FACILITIES AND EQUIPMENT.
10. RADIATION SAFET	Y PROGRAM.	11. WASTE MANAGEMENT.
(See 10 GFR 170 an		FEE CATEGORY AMOUNT ENGLOSED 3
13. GERTIFICATION, (R UPON THE APPLICA		THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING
THE APPLICANT AND A CONFORMATY WITH TIT TO THE BEST OF THESE WARNING: 18 U.S.C. SE	VMY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF T TLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, R KNOWLEDGE AND BELIEF.	THE APPLICANT, NAMED IN TIEM 2. CERTIFY THAT THIS APPLICATION IS PRÉPARED IN 1, 35, 30, 37, 39, AND THAT ALL INFORMATION CONTANED HEREIN IS TRUE AND CORRECT PAINNAL OFFERSE TO MAKE A WILLFULLY PAISE STATEMENT OR REPRESENTATION TO ITS ARRISORTION.
	- TYPEDYRENTED NAME AND TITLE	SIGNATURE _ C GATE
Bruce	A. Savage, Presider	in Mull 6-4-19
THE OPE PE		HERC USE ONLY HERCHARMEN COMMERCE
WPENEDEY A		

HRC FURNI 313 (10-2015)

# Suggested Format for Providing Information Requested in Items 5 through 11 of U.S. Nuclear Regulatory Commission Form 313

### Items 5 and 6: Materials To Be Possessed and Proposed Uses

Yes	No	Radionuclide	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	Specify Other Uses Not Listed on SSD Registration Certificate
		Cesium-137	Gauge manufacturer (or distributor) and model number:  CPN MCIDR	Specify activity per source and number of gauges requested.	Yes P Specific description of the gauge use:  Measurement  OF Physical  Profisities of  Materials	Submit safety analysis supporting safe use.)
		Americium- 241	Gauge manufacturer (or distributor) and model number:  CPN MCIDR	Specify activity per source and number of gauges requested.	Yes B Specific description of the gauge use: MEASUREMENT OF Physical Properties of Materials	Uses are:  (Submit safety analysis supporting safe use.)

	Manufacturer or Distributor Model No.	Quantity	Use as Listed on SSD Registration Certificate	SSD Registration Certificate
Californium- 252	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of gauges		□ Not applicable
	AMERICAN PROPERTY OF THE PROPE	requested.	200 A	Uses are:
				(Submit safety analysis supporting safe use.)
Radium-226	Gauge manufacturer (or distributor) and model number:	per source and number of		☐ Not applicable
		requested.		Uses are:
				(Submit safety analysis supporting safe use.)
Other Isotope (Specify):	Gauge manufacturer (or distributor) and model number:	Specify activity per source and number of	Yes □ Specific description of the gauge use:	□ Not applicable
		requested.		☐ Uses are:
				(Submit safety analysis supporting safe use.)
	Other Isotope (Specify):	Other Isotope (Specify):  Gauge manufacturer (or distributor) and model number:	Radium-226  Gauge manufacturer (or distributor) and model number:  Other Isotope (Specify):  Gauge manufacturer (or distributor) and model number:  Specify activity per source and number of gauges requested.  Specify activity per source and number of gauges requested.	Radium-226  Gauge manufacturer (or distributor) and model number:  Other Isotope (Specify):  Gauge manufacturer (or distributor) and model number:  Specify activity per source and number of gauges requested.  Specify activity Per source and number of gauges requested.  Specify activity Per source and number of gauge use:  Specify activity Per source and number of gauges Specific description of the gauge use:

### Items 7 through 11: Training and Experience, Facilities and Equipment, Radiation Safety Program, and Waste Disposal

	Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
7.	INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE— RADIATION SAFETY OFFICER	Documentation demonstrating the proposed radiation safety officer's training and experience (e.g., certificate of completion of the RSO's course and/or the authorized user's course).	Submit applicable documentation.	
	me:			
8.	TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS	Before using licensed materials, authorized users will have successfully completed one of the training courses described in the "Criteria" part of the section titled, "Training for Individuals Working in or Frequenting Restricted Areas" in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses."	<b>B</b>	
9.	FACILITIES AND EQUIPMENT	Provide a facility diagram for each permanent portable gauge storage location. Include on the diagram the use of adjacent areas (including above and below), and information relevant to public dose and security as discussed in Sections 8.10.5, "Public Dose," and 8.10.6, "Operating, Emergency, and Security Procedures," respectively, in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses"	Submit applicable documentation.	

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.1 RADIATION SAFETY PROGRAM—AUDIT PROGRAM	The applicant should not submit its audit program to the NRC for review during the licensing phase. The audit program will be reviewed during NRC inspections.	Need Not Be Sub Application	mitted with
10.2 RADIATION SAFETY PROGRAM— RADIATION MONITORING INSTRUMENTS	We will either possess and use, or have access to and use, a radiation survey meter that meets the criteria in the section titled, "Radiation Safety Program—Radiation Monitoring Instruments" in NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses," in the event of an incident.	5	
10.3 RADIATION SAFETY PROGRAM— MATERIAL RECEIPT AND ACCOUNTABILITY	Physical inventories will be conducted every 6 months or at other intervals approved by the NRC to account for all sealed sources and devices received and possessed under the license.  AND  We will develop, implement, and maintain procedures for ensuring accountability of licensed materials at all times.	<b>3</b>	
10.4 RADIATION SAFETY PROGRAM— OCCUPATIONAL DOSE	We will maintain, for inspection by the NRC, documentation demonstrating that unmonitored individuals are not likely to receive a radiation dose in excess of the limits in 10 CFR 20.1502(a).  OR  We will provide and require the use of individual monitoring devices (dosimetry). All personnel dosimeters that require processing to determine the radiation dose will be processed and evaluated by a NVLAP-approved processor.	D D	

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.5 RADIATION SAFETY PROGRAM— PUBLIC DOSE	The applicant is <i>not</i> required to submit a response to the public dose section in a license application. This matter will be examined during NRC inspections.	Need Not Be Sub Application	mitted with
10.6 RADIATION SAFETY PROGRAM— OPERATING, EMERGENCY, AND SECURITY PROCEDURES	We will implement and maintain the operating, emergency, and security procedures in Appendix G to NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Copies of these procedures will be provided to all gauge users and will be available at each jobsite.  OR  Operating, emergency, and security procedures will be developed, implemented, and maintained and will meet the criteria in section 8.10.6, "Radiation Safety Program—Operating, Emergency, and Security Procedures," NUREG-1556, Vol. 1, Rev. 2, "Consolidated Guidance About Materials Licenses: Program—Specific Guidance About Portable Gauge Licenses." Copies of these procedures will be provided to all gauge users and will be available at each jobsite.	CB C	For this item, checking this box indicates that alternative procedures will be provided as part of the application and that these procedures will be provided to all gauge users and will be available at each jobsite.

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.7 RADIATION SAFETY PROGRAM—LEAK TEST	Leak tests will be performed at intervals approved by the NRC or an Agreement State and specified in the SSD registration certificate. Leak tests will be performed by an organization licensed by the NRC or an Agreement State to provide leak testing services to other licensees; or by using a leak test sample collection kit supplied by an organization licensed by the NRC or an Agreement State to provide leak test kits and/or sample analysis services to other licensees and according to the kit supplier's instructions. Records of leak test results will be maintained.  OR  We will implement the model leak test program published in Appendix I of NUREG—1556, Volume 1, Revision 2, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauge Licenses." Records of leak tests will be maintained.		For this item, checking this box indicates that alternative equipment and/or procedures will be provided as part of the application and that records of leak tests will be maintained.

Item No. and Title	Suggested Response	Yes	Alternative Procedures Attached
10.8 RADIATION SAFETY PROGRAM— MAINTENANCE	Routine Cleaning and Lubrication We will implement and maintain procedures for routine maintenance of our gauges according to each manufacturer's written recommendations and instructions.	<b>D</b>	0
	Nonroutine Maintenance The gauge manufacturer or other person licensed by the NRC or an Agreement State will perform nonroutine maintenance or repair operations that require detaching the source or source rod from the gauge.	70	☐ The information listed in Appendix F of this NUREG supporting a request to perform nonroutine maintenance in house is attached.
10.9 RADIATION SAFETY PROGRAM— TRANSPORTATION	The applicant is <i>not</i> required to submit a response about transportation during the licensing process. The NRC will review this issue during inspection.	Need Not Be Sub Application	omitted with
11. WASTE MANAGEMENT— GAUGE DISPOSAL AND TRANSFER	The applicant is <i>not</i> required to submit a response about waste management during the licensing process; however, the licensee should establish and include gauge transfer and waste disposal procedures in its radiation safety program.	Need Not Be Sub Application	mitted with

## OHIO DEPARTMENT OF HEALTH LICENSE FOR RADIOACTIVE MATERIAL

Pursuant to Chapter 3748 of the Ohio Revised Code, and in reliance on statements and representations made by the licensee, a license is hereby issued authorizing the licensee named herein to receive, acquire, possess, and transfer radioactive material as 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 applications of Chapter 3748 of the Ohio Revised Code and all applicable rules promulgated thereunder. This license is subject to all applicable rules, regulations and orders of the Ohio Department of Health now or hereinafter in effect and to any conditions specified below.

LICENSEE	LICENSE NUMBER
1. Geotechnical Consultants, Inc.	3. 31210250023
	EXPIRATION DATE
2. 720 Greencrest Drive	4. May 1, 2024
Westerville, OH 43081-2387	FILE NUMBER - ID NUMBER
	5. <b>501088-</b> <i>15053</i>

6.		DIOACTIVE TERIAL	CHEMICAL AND/OR PHYSICAL FORM		XIMUM QUANTITY THAT LICENSEE MAY SSESS AT ANY ONE TIME UNDER THIS LICENSE
	<b>A</b> .	Cesium-137	A. Sealed source	, A.	No single source to exceed 370 MBq (10 mCi), total possession not to exceed 11.47 GBq (310 mCi)
	В	Americium-241:Be	B. Sealed source	В.	No single source to exceed 1.85 GBq (50 mCl), total possession not to exceed 57.35 GBq (1.55 Ci)
	. <b>C</b> .	Cesium-137	C. Scaled source	<b>c</b>	No single sources to exceed 333 MBq (9 mCi), total possessian not to exceed 666 MBq (18 mCi)
	D.	Americium-241:Be	D. Sealed source	D	No single sources to exceed 1.63 GBq (44 mCi), total possession not so exceed 3.26 GBq (88 mCi)

### 9. Authorized Use

- A and B. (31 gauges) To be used in CPN international Model MC Series PORTAPROBE gauges for measuring physical properties of materials.
- C. and D. (2 gauges) To be used in Truxler Model 3400 Series moisture/density gauges for measuring physical properties of materials.

### CONDITIONS

- 10. Licensed material may only be used at the licensee's facilities located at;
  - A. 720 Greenerest Drive, Westerville, OH 43081-2387
  - B 8433 South Avenue, Building 1, Suite 1, Boardman OH 44514
  - C 2380 Bellbrook Avenue, Suite 39-BC, Xenia, Ohio 45385
  - D. Temporary jobsites anywhere in the state of Ohio.
- 11. The Radiation Safety Officer for this license is: David A. Svolioda
- 12 Licensed material shall be used by, or under the supervision, of individuals who have received the training described in the renewal application dated February 8, 2019 or have completed the manufacturer's training program and have been approved in writing by the Radiation Safety Officer.
- 13. All sealed sources that are use or obtained shall have been evaluated or approved under the provisions of OAC 3701:1-46-49, or equivalent NRC or Agreement State regulation.
- 14. Sealed sources shall be tested for leakage and/or contamination in accordance with OAC 3701:1-38-24.
- 15. Scaled sources containing radioactive material shall not be opened or removed from their respective source holders by the licensee.

## OHIO DEPARTMENT OF HEALTH LICENSE FOR RADIOACTIVE MATERIALS SUPPLEMENTARY SHEET

Page 2 of 2

License Number: 31210250023

File Number – ID Number: 501088-15053

Amendment No. 23

- 16. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for at least 3 years from the date of each inventory, and shall include: the quantities and kinds of licensed material, manufacturers name and model numbers, location of the sources and/or devices, and the date of the inventory.
- 17 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, storage, or when not under the direct surveillance of an authorized user.
- 18. When performing tests at temporary job sites, the authorized user shall not leave the moisture density gauge unattended. Upon completion of tests the device shall be locked in the licensee's vehicle or a secure building to prevent unauthorized use, loss or theft.
- 19. Each portable nuclear gauge must be secured with a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the liceusee, in accordance with OAC 3701:1-40-16(H).
- 20. The licensee may transport licensed material in accordance with the provisions of OAC 3701:1-50.
- 21. 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 other persons specifically licensed by the Director, the NRC or an Agreement State to perform such services.
- 22. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of sealed source licensed material to quantities below the minimum limit specified in OAC 3701:1-40-17 for establishing decommissioning financial assurance.
- 23. Except as specifically provided otherwise in this license, the license shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures. The Ohio Department of Health's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
  - A. Renewal application dated February 8, 2019; Amendment 23 renews license number 31210250023 in its entirety.

For the Ohio Department of Health

DATE: 2-26-19

W. Gene Phillips, MBA, RS

Chief, Burcau of Environmental Health and Radiation Protection

on behalf of the Director of Health

Nº 17468

# Certificate Of Completion

This is to certify that	DAVID A. SVOBODA	has completed the
	•	Use of Nuclear Gauges,
		23.17 CO 2.23.1
City of STOUTSVILLE	State ofCHIC	by CPN Company.
1.00 00	CPN	

Willie Cline

WILLIE CLINE

CPN SMISSISS

2000 mark 1908s Waspall Decrems with the first Willie Cline

WILLIE CLINE



# **Certificate of Completion**

This is to certify that:

David A. Svoboda

Has completed a **Radiation Safety Officer** course and the use of portable density / moisture devices, (Nuclear Density / Moisture Gauge), as per <u>U.S. NRC NUREG 1556,vol.1,rev 1</u> and Agreement State requirements. To include initial Haz-Mat training required by IATA and U.S. Department of Transportation, 49 CFR, 172, Sub H and security awareness during transportation.

This training presentation by: Willie Cline / CTS, Inc. RSO

Willie Cline

### Cline's Technical Services, Inc.

www.clinetechnicalservices.com

course content on page 2 of certificate

For Nuclear Gauge Radiation Safety Officer.

## **Contents of Course**

### **Principles and Practices of Radiation Protection**

Theory, terminology, and practical explanation of Radioactive Materials, License requirements, Storage, Transportation (to include HAZ-MAT training required by US DOT 49 CFR, 172, sub H and security awareness) and Emergency Procedures to be used with portable nuclear devices of "soil, agriculture, roof, asphalt and other construction gauges" using small (not more than 300 millicurie) sources in sealed capsules.

### Radioactive 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 Square Law factors, effects of shielding, time, and distance in use of materials.

### Mathematics and Calculation basic to use and measurement of Radioactivity

Determination of typical radiation levels in mrems with 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 plain travel, normal health X-RAYS, ect.

### **Biological effect of Radiation**

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



### **ACKNOWLEDGEMENT - RECEIPT OF CORRESPONDENCE**

Name and Address of Applicant and/or Licensee	Date
	June 11, 2019
	License Number(s)
Geotechnical Consultants, Inc.	New License Application
ATTN: Bruce A. Savage, President	Mail Control Number(s)
720 Greencrest Drive Westerville, OH 43081	612421
vvocation, or recor	Licensing and/or Technical Reviewer or Branch
	Commercial, Industrial, R&D, & Academic Branch
This is to acknowledge receipt of your: Letter and	d/or Application Dated: 06/04/2019
The initial processing, which included an administrative	review, has been performed.
Amendment   ☐ Termination	New License Renewal
✓ There were no administrative omissions identified	during our initial review.
This is to acknowledge receipt of your application to above. Your application is deemed timely filed, and action has been taken by this office.	· ·
Your application for a new NRC license did not incl complete and submit NRC Form 531, Request for T following link: <a href="http://www.nrc.gov/reading-rm/do-rollow">http://www.nrc.gov/reading-rm/do-rollow</a> the instructions on the form for submission	axpayer Identification Number, located at the c-collections/forms/nrc531.pdf
The following administrative omissions have been	identified:
Your application has been assigned the above listed MAIL Coaction, please refer to this control number. Your application hote that the technical review, which is normally completed wother requests), may identify additional omissions or require a concerning the processing of your application, our contact info	nas been forwarded to a technical reviewer. Please ithin 180 days for a renewal application (90 days for all additional information. If you have any questions
Region I U. S. Nuclear Regulatory Commission of Nuclear Materials Safety 2100 Renaissance Boulevard, Suite King of Prussia, PA 19406-2713 (610) 337-5260, (610) 337-5313, (610) 337-5398, or (610) 337-5239	