

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.

302 397

Licensee

1. Geotechnical Services, Inc.

3. License Number 26-26790-01

2. 7050 South 10th Street
Omaha, NE 68128-5716

4. Expiration Date May 31, 2007

5. Docket or
Reference No. 030-344146. Byproduct, Source, and/or
Special Nuclear Material7. Chemical and/or Physical
Form8. Maximum Amount that Licensee
May Possess at Any One Time
Under This License

A. Cesium-137

A. Sealed source
(Troxler Dwg.
No. A-100281)A. No source to exceed
10 millicuries each

B. Americium-241

B. Sealed source
(Troxler Dwg.
No. A-100281)B. No source to exceed
50 millicuries each

C. Cesium-137

C. Sealed source
(Campbell Pacific Nuclear
Model No. CPN-131)C. No source to exceed
10 millicuries each

D. Americium-241

D. Sealed source
(Campbell Pacific Nuclear
Model No. CPN-131)D. No source to exceed
50 millicuries each

E. Cesium-137

E. Sealed source
(Troxler Dwg.
No. A-102112)E. No source to exceed
10 millicuries each

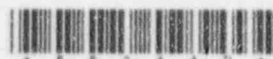
F. Americium-241

F. Sealed source
(Troxler Dwg.
No. A-102451)F. No source to exceed
50 millicuries each

G. Americium-241

G. Sealed source
(Troxler Dwg.
No. A-100608)G. No source to exceed 100
millicuries each

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**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

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Docket or Reference Number

030-34414

9. Authorized Use:

- A. and B. To be used in Troxler Model 2400 Series moisture density gauges.
- C. and D. To be used in Campbell Pacific Nuclear Models MC and 500 series moisture density gauges.
- E. and F. To be used in Troxler Model 3400 Series moisture density gauges.
- G. To be used in Troxler Model 3241 series asphalt content gauges.

CONDITIONS

- 10. Licensed material may be stored at the licensee's facilities located at 8400 East 13th Terrace, Kansas City, Missouri 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.
- 11.
 - A. The Radiation Safety Officer for this license is Melvin R. Cerny, P.E.
 - B. The Assistant Radiation Safety Officer for this license is Frank A. Comer.
- 12. Licensed material shall only be used by, or under the supervision and in the physical presence of, Melvin R. Cerny, P.E., Frank A. Comer or individuals who have successfully completed the manufacturer's training program for gauge users, have been instructed in the licensee's routine and emergency operating procedures and who have been designated by the Radiation Safety Officer.
- 13.
 - A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as specified by the certificate of registration referred to in 10 CFR 32.210.
 - B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.

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13. (Continued)

- C. In the absence of a certificate from a transferor indicating that a leak test has been made within 6 months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Sealed sources need not be leak tested if:
 - (i) they contain only hydrogen-3; or
 - (ii) they contain only a radioactive gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
 - (v) they are not designed to emit alpha particles, 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 or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- E. The leak test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region III, ATTN: Chief, Nuclear Materials Safety Branch, 801 Warrenville Road, Lisle, Illinois 60532-4351. The report shall specify the source involved, the test results, and corrective action taken.
- F. The licensee is authorized to collect leak test samples for analysis by R. M. Wester and Associates, Inc. or Great Plains Nuclear Services, Inc. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.

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14. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
15. 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.
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.
17. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
18. 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.
19. Any cleaning, maintenance, or repair of the gauge(s) that requires removal of the source rod shall be performed only by the manufacturer or by other persons specifically licensed by the Commission or an Agreement State to perform such services.
20. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.
21. The licensee may not possess and use materials authorized in Items 6, 7, and 8 until:
 1. The licensee has constructed the facilities and obtained the equipment described in the application and supporting documentation; and
 2. The U. S. Nuclear Regulatory Commission, Region III, ATTN: Chief, Materials Licensing Branch, 801 Warrenville Road, Lisle, IL 60532-4351 has been notified that activities authorized by the license will be initiated.
22. Within 30 days of the date of a decision not to complete the facility, acquire equipment, or possess and use authorized material, the licensee must notify the Commission in writing, of the decision.

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23. 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 March 3, 1997 and May 12, 1997.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date MAY 20 1997

By

Richard A. Hester
Nuclear Materials Licensing Branch, Region III

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BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

(FOR LFMS USE)
INFORMATION FROM LTS

Program Code: _____
Status Code: 3 _____
Fee Category: _____
Exp. Date: 0 _____
Fee Comments: _____
Decom Fin Assur Req'd: _____
T: _____

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
Applicant/Licensee: GEOTECHNICAL SERVICES, INC.
Received Date: 7/70310
Docket No: 3034414
Control No.: 302397
License No.:
Action Type: New Licensee

2. FEE ATTACHED

Amount: 550
Check No.: 406650

3. COMMENTS

Signed D. Hersey
Date 3-12-97

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / V)

1. Fee Category and Amount: 3P \$550

2. Correct Fee Paid. Application may be processed for:

Amendment _____
Renewal ✓
License _____

3. OTHER

Signed SC
Date 3/12/97

Log	<u>Mar 5 III</u>
Remitter	_____
Check No.	<u>406650</u>
Amount	<u>\$550</u>
Fee Category	<u>3P</u>
Type of Fee	<u>App</u>
Date Check Rec'd	<u>3/12/97</u>
Date Completed	<u>3/12/97</u>
By	<u>SC</u>

MAR 17 1997

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APPLICATION FOR MATERIAL LICENSE

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 8 HOURS. SUBMITTAL OF THE APPLICATION IS NECESSARY TO DETERMINE THAT THE APPLICANT IS QUALIFIED AND THAT ADEQUATE PROCEDURES EXIST TO PROTECT THE PUBLIC HEALTH AND SAFETY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0120), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, MAINE, MARYLAND,
MASSACHUSETTS, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, PENNSYLVANIA,
RHODE ISLAND, OR VERMONT, SEND APPLICATIONS TO:

LICENSING ASSISTANT SECTION
NUCLEAR MATERIALS SAFETY BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, PUERTO
RICO, SOUTH CAROLINA, TENNESSEE, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA,
SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION II
101 MARIETTA STREET, NW, SUITE 2900
ATLANTA, GA 30323-0199

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN,
SEND APPLICATIONS TO:

MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
801 WARRENVILLE RD.
LISLE, IL 60532-4351

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS,
LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA,
OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH,
WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

NUCLEAR MATERIALS LICENSING SECTION
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-8064

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- ☒ A. NEW LICENSE
☐ B. AMENDMENT TO LICENSE NUMBER _____
☐ C. RENEWAL OF LICENSE NUMBER _____

2. NAME AND MAILING ADDRESS OF APPLICANT (Include Zip code)

Geotechnical Services, Inc.
7050 South 110th Street
Omaha, Nebraska 68128-5716

3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

Geotechnical Services, Inc.
8400 East 13th Terrace
Kansas City, Missouri 64126-2378

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Melvin R. Cerny

TELEPHONE NUMBER

(402) 339-6104

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

- a. Element and mass number, b. chemical and/or physical form, and c. maximum amount which will be possessed at any one time

6. PURPOSE(F) FOR WHICH LICENSED MATERIAL WILL BE USED

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS

9. FACILITIES AND EQUIPMENT

10. RADIATION SAFETY PROGRAM

11. WASTE MANAGEMENT

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY 1.C.

AMOUNT ENCLOSED \$ 550.00

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39 AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER - TYPED/PRINTED NAME AND TITLE

Melvin R. Cerny, P.E., President, RSO

SIGNATURE

Melvin R. Cerny

DATE

March 3, 1997

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
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\$

APPROVED BY

pm: 3-5-97

DATE

RECEIVED

MAR 10 1997

302397

REGION III

PRINTED ON RECYCLED PAPER

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APPLICATION FOR MATERIAL LICENSE
SUPPLEMENTAL INFORMATION**

**ITEM 3. ADDRESS(ES) WHERE LICENSED MATERIAL WILL BE USED OR
POSSESSED.**

PRIMARY FACILITY:

Geotechnical Services, Inc.
8400 East 13th Terrace
Kansas City, MO 64126-2378
Phone - (816)461-1205
FAX - (816)461-4888

TEMPORARY JOBSITES:

Temporary jobsites in States subject to NRC's regulatory authority.

ITEM 5. RADIOACTIVE MATERIAL

5.a. Element and Mass Number:

- A. Cesium 137/AM 241:Be
- B. Cesium 137
- C. Am 241:Be
- D. Cesium 137
- E. Am 241:Be
- F. Am 241:Be

5.b. Chemical and/or Physical Form

- A. Sealed Source (Troxler Dwg. No. A-100281)
- B. Sealed Source (Campbell Pacific Nuclear-131)
- C. Sealed Source (Campbell Pacific Nuclear-131)
- D. Sealed Source (Troxler Dwg. No. A-102112)
- E. Sealed Source (Troxler Dwg. No. A-102451)
- F. Sealed Source (Troxler Dwg. No. A-100608)

5.c. Maximum amount which will be possessed at any one time.

- A. 10/50 Millicuries
- B. 10 Millicuries
- C. 50 Millicuries
- D. 9 Millicuries
- E. 44 Millicuries
- F. 100 Millicuries

5.d. Authorized use of each form.

- A. Troxler Model 2400 Series portable gauges
- B. Campbell Pacific Nuclear Model MC Series portable gauges
- C. Campbell Pacific Nuclear Model MC Series portable gauges

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- D. Troxler Model 3400 Series and 4640 Series portable gauges
- E. Troxler Model 3400 Series and 4640 Series portable gauges
- F. Troxler Model 3241 Series portable gauges

5.e. Possession limit commitment.

Geotechnical Services, Inc. will confine our possession of licensed material to quantities such that we will not exceed the applicable limits in 10 CFR 30.35(d).

5.f. Data on Registration Certificates

1. Manufacturer

- a. Troxler Electronic Laboratories, Inc.
- b. Troxler Electronic Laboratories, Inc.
- c. Troxler Electronic Laboratories, Inc.
- d. Campbell Pacific Nuclear corporation

2. Registry Number

- a. NC-646-D-128-S
- b. NC-646-D-130-S
- c. NC-646-D-131-S
- d. CA-208-D-102-S

3. Model Number

- a. 3241 Series
- b. 3400 Series
- c. 4640 Series
- d. MC Series

ITEM 6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED

A. Troxler Model 2400 Series portable gauges will be used to measure moisture/density of construction materials.

B. & C. Campbell Pacific Nuclear Model MC Series portable gauges will be used to measure moisture/density of construction materials.

D. & E. Troxler Model 3400 Series portable gauges will be used to measure moisture/density of construction materials.

D. Troxler Model 4640 Series portable gauges will be used to determine the density of Asphalt in thin layers.

F. Troxler Model 3241 Series portable gauges will be used to determine the asphalt content of a pavement mix.

The maximum depth sealed sources for all nuclear gauges will be lowered into the ground is 18 inches.

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**ITEM 7. INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND
THEIR TRAINING EXPERIENCE**

CORPORATE RADIATION SAFETY OFFICER

Melvin R. Cerny, P.E.

Mel has a Bachelor of Science degree in Civil Engineering from the University of Nebraska in December, 1972.

Mel also has a certificate from Troxler Electronic Laboratories dated March 21, 1974 in Radiological Safety and Gauge Operation.

Mel has 23 years of experience in the use of Nuclear Gauges as well as performing the duties of RSO in the agreement states of Nebraska, Colorado, Kansas and Iowa.

Geotechnical Services, Inc. management makes the commitment that the RSO has the responsibility and the authority to stop unsafe operations and will be given the time to fulfill his duties and responsibilities.

In Attachment A I have enclosed copies of the Radiation Safety Officers duties and responsibilities and an organizational chart for Geotechnical Services, Inc.

**ITEM 8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING
RESTRICTED AREAS**

Employees will use the devices listed in Item 5 under the supervision of the Radiation Safety Officer and his designated Assistant Radiation Safety Officer-Kansas City. It is my commitment and Geotechnical Services, Inc. commitment that before an individual is permitted to use a gauge, the individual will have:

1. Successfully completed a gauge manufacturer's course that meets the criteria in Part I of Appendix D of NRC Draft Regulatory Guide DG-0008
2. Received copies of, and been trained in, Geotechnical Services, Inc. standard operating and emergency procedures
3. Been designated as an authorized user by the RSO.

For the manufacturers course, the course instructor's qualifications will meet the criteria in Part II of Appendix D of NRC Draft Regulatory Guide DG-0008.

Geotechnical Services, Inc. will also provide annual refresher training to all users of the devices listed in Item 5. This annual training will be provided by the RSO or an instructor whose qualifications meet those described in Part II of Appendix D of NRC Draft Regulatory Guide DG-0008. This refresher training will include participating in "dry runs" of Geotechnical Services, Inc. emergency procedures and reviewing:

1. Standard operating and emergency procedures
2. DOT requirements
3. Changes in applicable regulations or license conditions
4. Deficiencies identified during the performance of annual audits of the radiation safety program.

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ITEM 9. FACILITIES AND EQUIPMENT

The permanent structure located at the address in Item 3 is an existing building built in 1991. It is a steel frame structure with steel siding. It sits at the top of a hill above abandoned limestone mines. The area is zoned commercial with no residential structures within several blocks.

The enclosed floor plan for the building indicates the location of the nuclear gauge storage areas. The storage areas are wood framed structures in the garage area of the building. The storage area has doors that are secured with hasps and padlocks. The padlocks are keyed and the keys are available only to personnel approved by the RSO. The storage area is labeled and placarded as required. Access to the garage area and the building in general is through normal keyed door locks. These doors are available for access by most of our personnel.

While gauges are being transported, the gauges will be locked in the trunk of a car, hidden from view while locked in a van, or secured by a lock and chain while in an open bed truck. Gauges when not stored in a secure area must be controlled by the constant surveillance of authorized users. When stored at temporary job sites, nuclear gauges will be stored in acceptable locked storage areas built in a locked job trailer. An acceptable storage area is of wood frame construction with a door that is secured with hasps and a keyed lock.

It is Geotechnical Services, Inc. policy that during a lunch hour or break, if you cannot keep the gauge under constant surveillance, then it must be returned to a secure storage area. No gauge must ever be left unattended if it is chained and locked in the open bed of a pickup.

ITEM 10. RADIATION SAFETY PROGRAM

10.1 Personnel Monitoring Program

Geotechnical Services, Inc. will monitor all gauge users with either a film badge or thermoluminescent dosimeter (TLD) when they use gauges. When film badges are used, they will be exchanged monthly. When TLD's are used they will be exchanged quarterly. We are now using film badges but are in the process of converting to TLD's.

Geotechnical Services, Inc. will only use a supplier of monitoring equipment that is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) as required by 10 CFR 27.1501. We currently have accounts for our agreement state licenses with:

ICN Dosimetry Service
PO Box 20819

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Fountain Vailey, CA 92728-0819
800-888-1936

and

Landauer, Inc.
2 Science Road
Glenwood, IL 60425-1586
(708)755-7000

10.2 Radiation Detection Instruments

Geotechnical Services, Inc. will have at each permanent facility at least one survey instrument capable of measuring between 1 microsievert per hour (0.1 millirem per hour) and 1 millisievert per hour (100 millirems per hour). This instrument will be used to perform surveys after an incident. Each survey instrument will be calibrated by the manufacturer at intervals not to exceed 12 months.

Before using a survey instrument, we will check the response of the instrument with a dedicated check source that was supplied with the instrument. If the instrument does not respond properly, we will not use the instrument until it is repaired and operable or until we obtain an operable instrument.

If we are unable to have a survey gauge available on a jobsite or within a reasonable distance of the jobsite we will commit to having access to a survey meter through a local university, hospital, health physicist or consultant.

10.3 Leak Testing

Leak tests will be performed at intervals not to exceed six months (or an interval approved by the NRC). Leak Test samples will be taken only by individuals authorized by the RSO. Leak test kits are and will be supplied automatically by one of the following suppliers:

R.M. Wester and Associates, Inc.
215 Indacom Drive
St. Peters, MO 63376
(314)928-9628

or

Great Plains Nuclear Services, Inc.
4338 1/2 Leavenworth Street
Omaha, NE 68105
(402)553-3090

Any analysis where the removable radioactive contamination activity exceeds 0.005 microcurries will cause the affected gauge to be removed from use and a report will be

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filed with the US Nuclear Regulatory Commission in accordance with 10 CFR 30.50(b)(2).

10.4 Inventories

Geotechnical Services, Inc. will conduct an inventory of all sealed sources and devices received and possessed under the license at intervals not to exceed six months. These inventories will occur at the same time that leak tests are performed. As a minimum the inventory records will include the radionuclide and amount (in units of becquerels or curies) of byproduct material in each sealed source; the manufacturer's name, model number, and serial number of each device containing byproduct material; the location of each sealed source and device; and the date of the inventory.

10.5 Maintenance

In conformance with 10 CFR 30.34(e), any maintenance (e.g., cleaning) performed by Geotechnical Services, Inc. personnel will always be performed with the radioactive source in the safe shielded position in accordance with the manufacturer's directions and recommendations. More extensive maintenance that requires removal of the source from its shielded position or removal of the source rod from the device will be performed by the gauge manufacturer or a commercial firm authorized by the NRC or an Agreement State to perform such services.

10.6 Transportation of Devices to Field Locations

Geotechnical Services, Inc. has and will maintain current copies of applicable DOT regulations and will develop and implement procedures for complying with applicable DOT regulations.

10.7 Operating and Emergency Procedures

Geotechnical Services, Inc. will:

1. Commit to having and implementing operating and emergency procedures;
2. Commit to providing a copy of our operating and emergency procedures to all users of gauging devices before they begin using the gauges;
3. Commit to having a copy of our operating and emergency procedures at each jobsite and with each gauge.
4. Copies of Geotechnical Services, Inc. operating and emergency procedures are enclosed in Attachment B.

10.8 Annual Audit of Radiation Safety Program

Geotechnical Services, Inc. will conduct annual audits of our Radiation Safety Program using the criteria as described in Appendix I of the US Nuclear Regulatory Commission's Draft Regulatory Guide DG-0008.

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10.9 Financial Assurance and Recordkeeping for Decommissioning

Geotechnical Services, Inc. will limit its possession of licensed materials to quantities below the minimum level specified in 10 CFR 30.35(d) not requiring financial assurance for decommissioning.

ITEM 11. WASTE MANAGEMENT

For the disposal of licensed material, Geotechnical Services, Inc. will transfer the material to an authorized recipient as specified in 10 CFR 20.2001(a). Authorized recipients are:

1. The original manufacturer or supplier of the device;
2. A commercial firm licensed by the NRC or an Agreement State to accept radioactive waste from other persons;
3. Another licensee authorized to possess the licensed material (i.e., whose license specifically authorizes the source and gauge by manufacturers' names and model numbers or similar designation).

Before transferring the radioactive material Geotechnical Services, Inc. will verify that the recipient is properly authorized to receive it by using one of the following methods as described in 10 CFR 30.41(d)(1 through 5). The licensed material will be packaged and shipped in accordance with NRC and DOT regulations. Records of the transfer will be maintained as required by 10 CFR 30.51.

ATTACHMENT A

**DUTIES AND RESPONSIBILITIES OF THE RADIATION SAFETY OFFICER
ORGANIZATIONAL CHART
ANNUAL AUDIT PROGRAM
CHECKLIST AND NOTES FOR ANNUAL AUDIT PROGRAM
FLOOR PLAN**

DUTIES AND RESPONSIBILITIES OF THE RADIATION SAFETY OFFICER

The Radiation Safety Officer (RSO) is responsible for implementing the radiation safety program and ensuring that radiation safety activities are performed in accordance with approved procedures and regulatory requirements.

The RSO's duties and responsibilities

1. Ensure that licensed material possessed by the licensee is limited to the kinds (e.g.,
2. license.
3. Ensure that individuals using gauges are properly trained; are designated by the RSO; receive refresher training at least annually, including participation in a "dry run" of emergency procedures and review of operating and emergency procedures and Department of Transportation (DOT) requirements; and are informed of all changes in regulatory requirements and deficiencies identified during annual audits.
4. Ensure that personnel monitoring devices are used as required and reports of personnel exposure are reviewed in a timely manner.
5. Ensure that gauges are properly secured against unauthorized removal at all times when gauges are not in use.
6. Ensure that proper authorities are notified in case of accident, damage to gauges, fire, or theft.
7. Ensure that audits are performed at least annually to ensure that (a) the licensee is abiding by NRC and DOT regulations and the terms and conditions of the license (e.g., periodic leak tests, inventories, use limited to trained, approved users), (b) the licensee's radiation protection program content and implementation achieve occupational doses and doses to members of the public that are ALARA (see 10 CFR 20.1101), and (c) the licensee maintains required records with all required information (e.g., records of personnel exposure; receipt, transfer, and disposal of licensed material; gauge user training) sufficient to comply with NRC requirements.
8. Ensure that results of audits, identification of deficiencies, and recommendations for change are documented (and maintained for at least 3 years) and provided to management for review; ensure that prompt action is taken to correct deficiencies.

9. Ensure that audit results and corrective actions are communicated to all personnel who use licensed material (regardless of their location or the license under which they normally work).
9. Ensure that audit results and corrective actions are communicated to all personnel who use licensed material (regardless of their location or the license under which they normally work).
10. Ensure that licensed material is transported in accordance with all applicable DOT requirements.
11. Ensure that licensed material is disposed of properly.
12. Ensure that he or she has up-to-date copies of NRC's regulations, reviews new or amended NRC regulations, and revises licensee procedures, as needed, to comply with NRC regulations.
13. Ensure that the license is amended whenever there are changes in licensed activities, responsible individuals, or information or commitments provided to NRC in the licensing process.
14. Make sure the following checklists and files are created for each group or office location.

CHECK LIST FOR INITIAL RECEIPT OF GAUGE OR LICENSE

Post a copy of Notice to Employees for Radiation Protection. *Some licensing agencies will supply this document with the first issuance of the license or you may have to request a copy.*

Post a current copy of your license or post a notice describing the document and indicating where it may be examined.

Post a copy of your Emergency Safety Plan.

Obtain a current copy of the Radiation Control Regulations from the agency who issued your license, and post it or post a notice describing the document and indicating where it may be examined.

Issue to each gauge operator a document authorizing the use of the radioactive material under license xxxx. It should be signed by the RSO. (It may be one document with all operator names or wallet size for each operator.)

Check the gauge container to see that it includes: 1) a copy of your license, 2) a current leak test, 3) a copy of your safety plan, 4) a copy of the gauge operators' manual, and 5) a copy of the operator authorization document (or wallet copy with operator).

Provide a secured storage area and mark it with Caution Radioactive Material signs.

If gauges are not assigned permanently to each operator, but are signed out on a daily or weekly basis, then post an in-out log at the gauge storage location.

Issue to each operator a "SHIPPING PAPER" to be located on the driver's door or on the seat next to the driver when transporting the gauge by private vehicle. Use your company letterhead like the sample document attached.

Read your license and not any special conditions which require special procedures to be established.

Create the following files or their equivalent:

LICENSE FILE

This file should start with all correspondence regarding application for the license. Next should be the issued license. All future correspondence regarding the license and any amendments should follow. If you make any changes which affect the license, notify the licensing agency, i.e. new storage location, new RSO, new safety plan, changes in operators (if controlled by the license), etc. Include copies of the authorization to use document as issued to your operators.

Include a copy of certification and safety analysis demonstrating that the special form material and package meet the requirements (copy attached, must be maintained on file for one year after last shipment including by private vehicle).

Include a copy of the manufacturer's license. Required if the gauge is to be returned for service.

Maintain a current list of designated operators. For quick access, this list should be stapled to the folder cover page.

GAUGE FILE

One per each gauge in possession whether owned, leased or borrowed. Object is to show the record of transfer of radioactive material and the record of leak tests performed.

The file starts with the document covering initial receipt of the gauge. Normally this will be a copy of the sellers packing list or bill of sale showing the gauge serial number.

The next document should be the leak test performed by the seller prior to shipping the gauge. These documents should be followed by copies of the results of all subsequent leak tests.

Included should be copies of any documents covering transfer of the gauge, i.e., letters covering temporary operation in another state, letters and packing lists covering return to the factory for service, etc.

If the gauge is sold, then the file should be closed with copies of documents showing that the gauge was transferred to a licensed recipient, i.e., recipient's license and receiving document or letter of receipt.

To make it easier to determine the status of the gauge, it is recommended that a summary document be stapled to the folder cover page. It should be a dated log of gauge movement in and out of the license control and other activity such as leak tests starting with the initial receipt. If it is the users practice to assign a gauge permanently to one operator, then this is a good place to record the assignments.

PERSONNEL RADIATION EXPOSURE FILE

Object is to maintain radiation exposure records for all required personnel.

The file should include copies of the monthly report from the film badge service. Copies of memos or letters covering the investigation of any abnormal report values should be included.

Dosemeter records should be maintained until written permission is received from the licensing agency to discard. If the licensed company ceases to exist, it should mail the records to the licensing agency.

Other records should be kept in accordance with the licensing agency requirement, normally three years.

PERIODIC PROCEDURES

Perform leak tests at a frequency as specified in your license or the regulations (normally six months unless exempted to one year).

Perform a visual inspection of the gauge. Check that the gauge and case labels are still readable and the locks operable.

Verify compliance of the storage area in terms of security and caution signs.

Provide for periodic safety re-training of all personnel. Always strive for radiation exposure which is *AS LOW AS REASONABLY ACHIEVABLE (ALARA)*.



Larry Cerny
CHAIRMAN

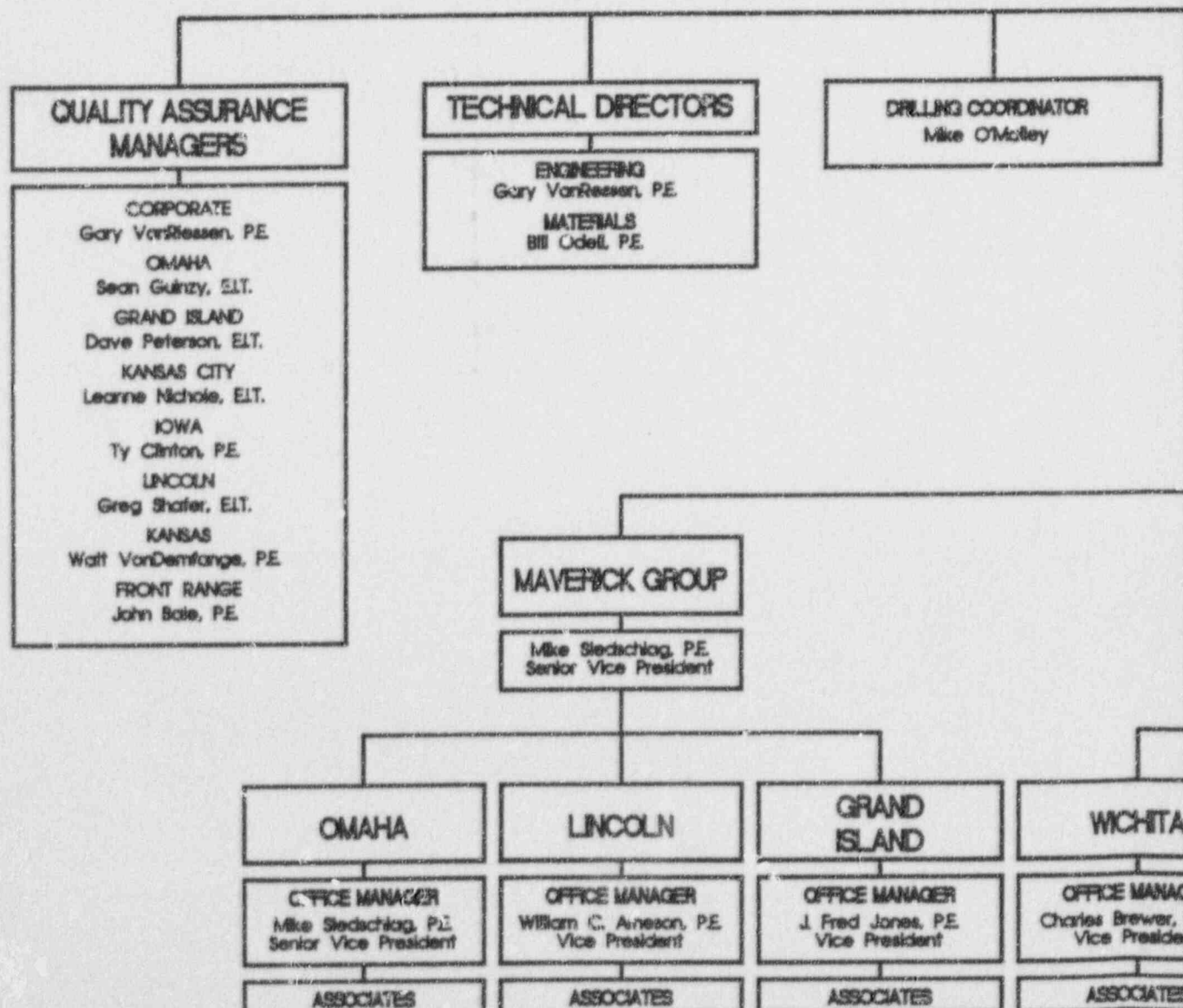
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ANNUAL AUDIT PROGRAM

An audit is conducted, in part, to fulfill the requirements of 10 CFR 20.1101 for an annual review of the content and implementation of the licensee's radiation protection program. It should also identify program weaknesses and allow licensees to take early corrective actions (before an NRC inspection). During an audit, the auditor needs to keep in mind not only the requirements of NRC's regulations, but also the licensee's commitments in its applications and other correspondence with NRC. The auditor should also evaluate whether the licensee is maintaining exposures to workers and the general public as low as is reasonably achievable (ALARA), and if not, make suggestions for improvement.

In performing the annual audit of each office's Radiation Protection Program, use of the Checklist and Notes For The Annual Audit Program is required. Guidance is provided here on completing each section of the checklist. In the remarks portions of the checklist, note any deficiencies that were identified and the corrective actions taken (or to be taken).

1. **Audit History.** Enter the date of the last audit, whether any deficiencies were identified, and whether actions were taken to correct the deficiencies.
2. **Organization and Scope of Program.** Briefly describe the organizational structure, noting any changes in personnel. Describe the scope of licensed activities at the audited location. Check whether the Radiation Safety Officer (RSO) is the person identified in the license and fulfills the duties specified in the license.
3. **Training, Retraining, and Instructions to Workers.** Ensure that workers have received the training required by 10 CFR 19.12. Be sure that, before being permitted to use a gauge, the user has received training (from the manufacturer or in an alternative course approved by NRC) and has a copy of, and training in, the licensee's operating and emergency procedures; records should be maintained. Note whether refresher training is conducted in accordance with licensee commitments. By interview and observation of selected workers, ensure that each has a copy of the licensee's operating and emergency procedures and can implement them properly.
4. **Internal Audits.** Verify that audits fulfill the requirements of 10 CFR 20.1101, are conducted in accordance with licensee commitments, and are properly documented.
5. **Facilities.** Verify that the licensee's facilities are as described in its license documents.
6. **Materials.** Verify that the license authorizes the sealed source/device combinations that the licensee possesses. Verify that the licensee uses the source/device

combinations in accordance with license provisions. Ensure that gauges are maintained in accordance with licensee commitments.

7. **Leak Tests.** Verify that all sealed sources are tested for leakage at the prescribed frequency and in accordance with licensee commitments. Records of results should be maintained.
8. **Inventories.** Verify that inventories are conducted at least once every 6 months to account for all sealed sources; inventory records should be maintained.
9. **Radiation Surveys.** Verify that the licensee has at least one operable, calibrated survey instrument at each jobsite and that the instruments are calibrated in accordance with licensee commitments; in accordance with 10 CFR 20.2103, calibration records must be retained for three years after the record is made. Alternatively, evaluate the licensee's arrangements for timely access to survey instruments in case of an incident. Check that radiation levels in the vicinity of use of the gauge and immediately outside areas used for gauge storage are within regulatory limits; in accordance with 10 CFR 20.2103, records of surveys must be retained for three years after the record is made. Verify compliance with 10 CFR 20.1301; records should be maintained.
10. **Receipt and Transfer of Radioactive Material (Includes Waste Disposal).** Verify that gauges received from others (e.g., new gauges) are received, opened, and surveyed in accordance with 10 CFR 20.1906. Ensure that gauge transfers are performed in accordance with 10 CFR 30.41. Records of surveys, receipt, and transfer must be maintained in accordance with 10 CFR 21.2103 and 30.51.
11. **Transportation.** Determine compliance with Department of Transportation (DOT) requirements. Verify that hazardous materials training is conducted as required by 49 CFR 172.700-704. Verify that radioactive packages are prepared, marked, and labeled in accordance with 49 CFR parts 172 and 173 requirements. Be sure that the licensee has records of performance testing of its special form sources and DOT-7A packages. Verify that shipping papers are prepared, contain all needed information, and are readily accessible during transport (49 CFR 172.200-204 and 177.718). Check that packages are blocked and braced (49 CFR 177.842). Check for any needed placarding (49 CFR 172.504); if overpacks are used, verify that they are properly marked and labeled (49 CFR 173.25).
12. **Personnel Radiation Protection.** Evaluate the licensee's determination that unmonitored personnel are not likely to receive more than 10 percent of the allowable limits. Alternatively, if personnel dosimetry is provided and required, verify that it complies with 10 CFR 20.1501(c) and licensee commitments. Review personnel monitoring records; compare exposures of individuals doing similar work; determine reasons for significant differences in exposures. If any worker declared her

pregnancy in writing, evaluate the licensee's compliance with 10 CFR 20.2101-2104 and 20.2106. (Check whether records are maintained as required by 10 CFR 20.2101-2104 and 20.2106.)

13. **Auditor's Independent Measurements (If Made).** If the licensee performs extended maintenance, the auditor should make independent measurements and compare the results with those made or used by the licensee. If the licensee does not perform extended maintenance, the auditor may, if desired, make independent measurements.
14. **Notification and Reports.** Check on the licensee's compliance with the notification and reporting requirements in 10 CFR Parts 19, 20, and 30. Ensure that the licensee is aware of the telephone number for NRC's Emergency Operations Center.
15. **Posting and Labeling.** Check for compliance with the posting and labeling requirements of 10 CFR 19.11, 20.1902, 20.1904, and 21.6.
16. **Recordkeeping for Decommissioning.** Check to determine compliance with 10 CFR 30.35(g).
17. **Bulletins and Information Notices.** Check to determine whether the licensee is receiving bulletins, information notices, NMSS Newsletters, etc., from NRC. Check whether the licensee took appropriate action in response to NRC mailings.
18. **Special License Conditions or Issues.** Verify compliance with any special conditions on the licensee's license. If the licensee has any unusual aspect of its work with portable gauges, review and evaluate compliance with regulatory requirements. If the licensee conducts licensed activities at locations other than the one being audited, consider the deficiencies identified at the other locations and ensure that the corrective actions implemented in response to those deficiencies have, in fact, been implemented at the audited locations.
19. **Continuation of Report Items.** This section is self-explanatory.
20. **Problems or Deficiencies Noted, Recommendations.** This section is self-explanatory.
21. **Evaluation of Other Factors.** Evaluate management's involvement with the radiation safety program, whether the RSO has sufficient time to perform his/her duties, and whether the licensee has sufficient staff to handle the workload and maintain compliance with regulatory requirements.

CHECKLIST AND NOTES FOR ANNUAL AUDIT PROGRAM

Audit Report No. _____

License No. _____

Licensee's name and mailing address:

Audit of activities at (Address):

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

Contact at Audit Location _____

Telephone No. _____

Date of Last Audit of this Location _____

Date of This Audit _____

Summary of Findings and Action:

- ☐ No deficiencies
- ☐ Deficiencies
- ☐ Action on previous deficiencies

Recommendations:

Auditor: _____
(Signature)

Date: _____

1. **AUDIT HISTORY**

() N/A¹ - Initial audit

- A. Last audit of this location conducted _____
- B. Any problems or deficiencies identified during last two audits
or two years, whichever is longer? () Y () N
- C. Open problems or deficiencies from previous audits:

<u>Requirement</u>	<u>Prob./Def.</u>	<u>Correction Action Taken (Y/N)</u>	<u>Status Open/Closed</u>

- D. Any previous problem or deficiency not corrected or repeated?

Explain:

2. **ORGANIZATION AND SCOPE OF PROGRAM**

- A. Briefly describe the organizational structure.

- (1) Structure is as described in license documents () Y () N
- (2) There are multiple authorized locations of use. () Y () N
- (3) Briefly describe the scope of activities involving
byproducts material, frequency of use, staff size, etc.

- B. Radiation Safety Officer

- (1) The same person who is authorized on the license. () Y () N
- (2) Fulfills duties as RSO (see Appendix C of
this guide) () Y () N

- C. Use is only by authorized individuals who have been designated by the RSO.

() Y () N

Remarks:

3. TRAINING, RETRAINING, AND INSTRUCTIONS TO WORKERS

- A. Instructions to workers are per 10 CFR 19.12

() Y () N

- B. Training program is required

() Y () N

- (1) Initial training - Manufacturer's Course:

Before using a gauge, user received (a) an alternative course (as described in correspondence with NRC as to content, instructor qualifications, tests, etc.); and (b) a copy of and training in licensee's operating and emergency procedures.

() Y () N

Records of training are maintained.

() Y () N

- (2) Initial training - Alternative Course:

Before using a gauge, user received (a) an alternative course (as described in correspondence with NRC as to content, instructor qualifications, tests, etc.); and (b) a copy of and training in licensee's operating and emergency procedures.

() Y () N

Records of training are maintained.

() Y () N

- (3) Refresher training

() Y () N

Frequency, topics, and instructor are as described in correspondence with NRC.

() Y () N

Records of refresher training are maintained.

() Y () N

- C. Evaluation of individual's understanding of procedures and regulations based on interviews and observation of selected workers.

- (1) Each worker has an up-to-date copy of the licensee's operating and emergency procedures.

() Y () N

- (2) Each worker has an adequate understanding of:

Current operating procedures

() Y () N

Emergency procedures

() Y () N

Use of survey meters (if licensee expects workers to use meters after an incident)

() Y () N () N/A

- (3) Workers can demonstrate proper implementation of selected procedures, including security of the gauge when in storage and maintaining constant surveillance and control during use. ☐ Y ☐ N

D. Revised Part 20. Workers are cognizant of requirements for:

- (1) Radiation Protection Program [20.1101] ☐ Y ☐ N
(2) Annual dose limits [20.1301, 1302] ☐ Y ☐ N
(3) New NRC Forms 4 and 5 ☐ Y ☐ N ☐ N/A
(4) 10% monitoring threshold [20.1502] ☐ Y ☐ N
(5) Dose limits to embryo/fetus and declared pregnant worker [20.1208] ☐ Y ☐ N
(6) Procedures for opening packages [20.1906] ☐ Y ☐ N ☐ N/A

Remarks:

4. INTERNAL AUDITS, REVIEWS OR INSPECTIONS

- A. Audits are conducted. ☐ Y ☐ N
(1) Audits conducted by
(2) Frequency
B. Content and implement of the radiation protection program is reviewed annually [20.1101 (c)]. ☐ Y ☐ N
C. Records of program are maintained [20.2102]. ☐ Y ☐ N

5. FACILITIES

Facilities are as described in the license application. ☐ Y ☐ N

Remarks:

6. MATERIALS

- A. Isotopes, quantities, manufacturer's name and model number of sources and devices, and use are as authorized on the license. ☐ Y ☐ N

B. Maintenance of gauges:

- (1) If gauges are maintained by licensee, source is in shielded position in accordance with manufacturer's directions or recommendations.

() Y () N

- (2) For work that requires source be in unshielded position, source is returned to manufacturer; if maintenance is licensee-performed, needs specific authorization and must be performed in accordance with commitments to NRC.

() Y () N () N/A

Remarks:

7. LEAK TESTS

- A. Leak tests are performed as described in correspondence with NRC (whether performed by a consultant, a leak test kit, or the licensee).

() Y () N

- B. Frequency is every 6 months or other interval approved by NRC or Agreement Site.

() Y () N

- C. Records with appropriate information are maintained.

() Y () N

Remarks:

8. INVENTORIES

- A. Inventories are conducted at 6 month intervals.

() Y () N

- B. Records with appropriate information are maintained.

() Y () N

Remarks:

9. RADIATION SURVEYS

- A. Instruments and equipment

() N/A

- (1) Appropriate operable survey instruments are possessed or readily accessible.

() Y () N

- (2) Instruments are calibrated as required [20.1501].

() Y () N

- (3) Calibration records are maintained [20.2103 (a)]. ☐ Y ☐ N
(4) At least 1 meter is at each jobsite. ☐ Y ☐ N

OR

Adequate arrangements have been made for timely access to instruments in case of incident at any jobsite. ☐ Y ☐ N

B. Briefly describe area survey requirements [20.1501 (a)].

- C. Radiation surveys are performed as required [20.1501 (a)]. ☐ Y ☐ N
(1) Radiation levels are within regulatory limits ☐ Y ☐ N
(2) Corrective action is taken and documented ☐ Y ☐ N
D. Records are maintained [20.2103]. ☐ Y ☐ N

E. Protection for members of the public.

- (1) Adequate surveys are made to demonstrate either (a) that the TEDE to the individual likely to receive the highest dose does not exceed 100 mrem (1 mSv) in a year or (b) that if an individual were continuously present in an unrestricted area, the external dose would not exceed 2 mrem (0.02 mSv) in any hour and 50 mrem (0.5 mSv) in a year [20.1301 (a), 1302 (b)]. ☐ Y ☐ N
(2) Unrestricted area radiation levels do not exceed 2 mrem (0.02 mSv) in any one hour [20.1301 (a) (2)]. ☐ Y ☐ N
(3) Records are maintained [20.2103, 2107]. ☐ Y ☐ N

Remarks:

10. RECEIPTS AND TRANSFER OF RADIOACTIVE MATERIAL
(INCLUDES WASTE DISPOSAL)

- A. Describe how new gauges are received and by whom. ☐ N/A
B. Written procedures for opening packages (e.g., new gauges) are established and followed [20.1906 (e)]. ☐ Y ☐ N

- C. If package shows evidence of degradation, contamination and radiation levels are monitored. () Y () N () N/A
- D. Monitoring of degraded packages is performed within time specified [20.1906 (c)]. () Y () N () N/A
- E. Transfer between licensees (including "disposal" of unneeded gauges) is performed per 10 CFR 30.41. () Y () N () N/A
- F. All sources are surveyed before shipment and transfer [20.1501 (a), 49 CFR 173.475 (i), license condition]. () Y () N
- G. Records of surveys and receipt or transfer are maintained [20.2103 (a), 30.51]. () Y () N
- H. Transfers within licensee's authorized users or locations are performed as required [license condition]. () Y () N () N/A
- I. Package receipt/distribution activities are evaluated for compliance with 10 CFR 20.1301 [20.1302]. () Y () N () N/A

Remarks:

11. TRANSPORTATION (10 CFR 71.5(a) and 49 CFR 170-189) () N/A

- A. Licensee shipments are:
- Delivered to common carriers. () Y () N () N/A
- Transported in licensee's own private vehicle. () Y () N () N/A
- No shipments since last inspection. () Y () N () N/A
- B. HAZMAT training [172.700-704] () Y () N () N/A
- C. Packages () N/A
- (1) Authorized packages are used [173.415, 416(b)]. () Y () N
- (2) Performance test records are kept on file for:
- a. Special Form Sources [173.476(a)]. () Y () N
- b. DOT-7A packages [173.415(a)]. () Y () N
- (3) Two labels (White-I, Yellow-II, or Yellow-III) with TI, Nuclide, Activity, and Hazard Class are used [172.403, 176.441]. () Y () N
- (4) Packages are properly marked (shipping name, UN Number, package type, RQ, name and address of consignee) [172.301, 306, 310, 312, 324]. () Y () N

- (5) Packages are closed and sealed during transport [173.475 (f)]. ☐ Y ☐ N
- (6) Packages have proper overpacks, if used (shipping name, UN Number, labeled, statement indicating that inner package complies with specification packaging) [173.25]. ☐ Y ☐ N ☐
N/A

D. Shipping Papers

- (1) Are prepared and used [172.200(a)]. ☐ Y ☐ N
- (2) Include proper shipping name, hazard class, UN Number, 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" (as applicable) [172.200-204]. ☐ Y ☐ N
- (3) Are readily accessible during transport [177.718 (e)]. ☐ Y ☐ N ☐ N/A

E. Vehicles

- (1) Cargo is blocked and braced [177.842(d)]. ☐ Y ☐ N
- (2) Are placarded, if needed [172.504]. ☐ Y ☐ N

- F. Any incidents are reported to DOT [171.15, 16]. ☐ Y ☐ N

Remarks:

12. PERSONNEL RADIATION PROTECTION

- A. ALARA considerations are incorporated into the Radiation Protection Program [20.11019b)]. ☐ Y ☐ N
- B. Adequate documentation of determination that unmonitored gauge users are not likely to receive > 10% of allowable limit [20.1502(a)]. ☐ Y ☐ N ☐ N/A

OR

External dosimetry is provided and required ☐ Y ☐ N ☐ N/A

- (1) Supplier _____ Frequency _____ ☐ Y ☐ N
- (2) Supplier is NVLAP-approved [20.1501(c)] ☐ Y ☐ N
- (3) Dosimeter are exchanged at specified frequency [license condition]. ☐ Y ☐ N

- C. Reports ☐ N/A

- (1) Reviewed by _____ Frequency _____
- (2) Auditor reviewed personnel monitoring records
for period _____ to _____
- (3) Prior dose determined for individuals likely to receive doses [20.2104]. () Y () N
- (4) Maximum exposures TEDE _____ Other _____
- (5) NRC Forms or equivalent [20.21049(d), 2106(c)]:
- a. NRC-4² () Y () N Complete: () Y () N
- b. NRC-5³ () Y () N Complete: () Y () N
- (6) Worker declared her pregnancy in writing since last audit (review records). () Y () N () N/A
- If yes, determine compliance with [20.1208]. () Y () N
- Check for records per 10 CFR 20.2106(e) () Y () N
- D. Records of exposures, surveys, monitoring, and evaluations maintained [20.2102, 2103, 2106, license condition]. () Y () N

Remarks:

13. AUDITOR'S INDEPENDENT MEASUREMENTS (IF MADE)

- A. Survey instrument Serial No. Last Calibration
- B. Auditor's measurements were compared to licensee's. () Y () N

C. Describe the type, location, and results of measurements:

14. NOTIFICATION AND REPORTS

() N/A

- A. Licensee in compliance with 10 CFR 19.13 and 30.50 reports to individuals, public and occupational, monitored to show compliance with 10 CFR Part 20). () Y () N () N/A
- B. Licensee in compliance with 10 CFR 20.2201 and 30.50 (theft or loss). () Y () () None
- C. Licensee in compliance with 10 CFR 20.2202 and 30.50 (theft or loss) () Y () () None
- D. Licensee in compliance with 10 CFR 20.2203 and 30.50 (theft or loss) () Y () () None
- E. Licensee aware of new telephone number for NRC Emergency Operations Center [(301)816-5100]. () Y () N

15. POSTING AND LABELING

- A. NRC-3, "Notice to Employees," is posted [19.11(c)]. () Y () N
- B. Parts 19, 20, 21, Section 206 of Energy Reorganization Act, procedures adopted pursuant to Part 21, and license documents are posted, or a notice indicating where documents can be examined is posted [19.11, 21.6]. () Y () N
- C. Other posting and labeling per 10 CFR 20.1902 and 1904, and the licensee is not exempted by 10 CFR 20.1903, 20.1905 () Y () N

Remarks:

16. RECORDKEEPING FOR DECOMMISSIONING (if needed)

() N/A

- A. Records of information important to the safe and effective decommissioning of the facility maintained in an independent and identifiable location until license termination [30.35(g)]. () Y () N
- B. Records include all information outlined in 10 CFR 30.35(g). () Y () N

Remarks:

17. BULLETINS AND INFORMATION NOTICES

- A. Licensee receives NRC Bulletins, NRC Information Notices, NMSS Newsletters, etc. () Y () N
- B. Appropriate action taken in response to Bulletins, Information Notices, etc. () Y () N

Remarks:

18. SPECIAL LICENSE CONDITIONS OR ISSUES () N/A

- A. Review special license conditions or other issues (e.g., extended maintenance); describe findings:
- B. Problems or deficiencies identified at licensee facilities other than at audit location:
- C. Evaluation of compliance:

19. CONTINUATION OF REPORT ITEMS () N/A

- A. (If more space is needed, use separate sheets and attach to report.)

20. PROBLEMS OR DEFICIENCIES NOTED; RECOMMENDATIONS () N/A

Note: Briefly state (1) the requirement and (2) how and when violated. Provide recommendations for improvement.

21. EVALUATION OF OTHER FACTORS

- A. Senior licensee management is appropriately involved with the radiation safety program and RSO oversight () Y () N
- B. RSO has sufficient time to perform his/her radiation safety duties and is not too busy with other assignments. () Y () N
- C. Licensee has sufficient staff. () Y () N

Remarks/recommendations:

EDITION

1-10-58

Overhead Ex

WASH BAY

38'10"

ONE TRAIL
(COVERED)

WAREHOUSE

20'

LA HILL
IN SHED

CONCRETE
TRAIL
BATHING

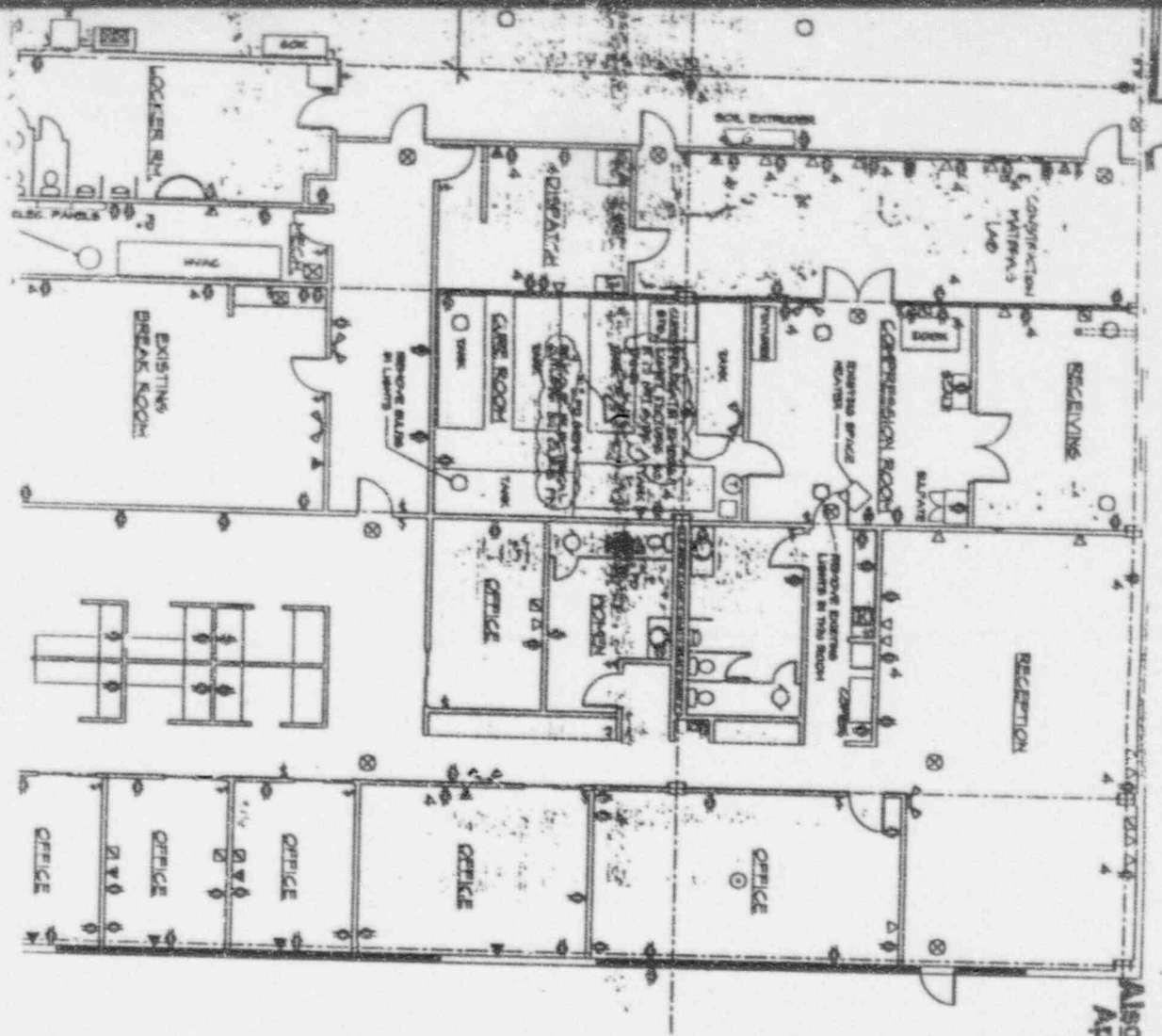
RAILROAD



10/1/85

ANSTEC
APERTURE
CARD

Also Available on
Aperture Card



ES, INC.
RACE

LAWRENCE GOLDBLATT
ARCHITECTURE PLANNING DEVELOPMENT

Laboratory at 8400 E. 13th
Terrace, Kansas City, MO.
9166120365-02

ATTACHMENT B

**STANDARD OPERATING AND EMERGENCY PROCEDURES
LEAK TEST PROCEDURES
NORMAL OPERATING PROCEDURES
EMERGENCY PROCEDURES
SHIPPING PAPER PROCEDURES
SHIPPING PAPER
BILL OF LADING
EMERGENCY PHONE NUMBERS FOR MISSOURI**

STANDARD OPERATING AND EMERGENCY PROCEDURES KANSAS CITY, MISSOURI

OPERATING PROCEDURES

1. Before removing the gauge from its place of storage, check to make sure that the gauge source rod is in the shielded, locked position, then lock the transport case if possible.
2. Sign the gauge out in a log book, stating the dates of use, names of the authorized users who will be responsible for the gauge, and the temporary jobsites where the gauge will be used.
3. Never leave the gauge unattended while in your custody.
4. Follow all applicable Department of Transportation (DOT) requirements when transporting the gauge.
5. Do not touch the source rod with your fingers, hands, or any part of your body, and always make sure the source rod is in the shielded position after each measurement is made.
6. Always wear your assigned thermoluminescent dosimeter (TLD) or film badge when using the gauge.
7. Never wear another person's TLD or film badge.
8. Never store your TLD or film badge near the gauge.
9. Always keep unauthorized persons away from the area where the gauge is to be used.
10. Always maintain constant surveillance and immediate control of the gauge when it is not in storage.
11. To make gauges more visible to operators of heavy equipment at construction sites, always "stake and flag" each gauge, being sure that the flags are tall enough to be seen by heavy equipment operators. (A fiberglass whip with a flag at the top (available as a bicycle accessory) can be attached to the gauge to make its location more obvious to heavy equipment operators.)
12. Never look under the gauge when the source rod is being lowered into the ground.

13. After each measurement, always return the source to the shielded position and lock it there.
14. When the gauge is not in use at a temporary jobsite, place the gauge in a secured storage location (e.g., locked in the trunk of a car or locked in a storage shed).
15. Return the gauge to its proper storage location at the end of the work shift.
16. When the gauge is returned to storage, so indicate in the source log.

EMERGENCY PROCEDURES

If the source fails to return to the shielded position (e.g., as a result of being damaged) or if any other emergency or unusual situation arises (e.g., the gauge is struck by a moving vehicle, is dropped, or is in a vehicle involved in an accident):

1. Immediately secure the area around the gauge for a radius of at least 15 feet. This area must be maintained until the condition of the gauge is evaluated.
2. Prevent unauthorized personnel from entering the secured area.
3. If any heavy equipment is involved, detain the equipment until it is determined there is no contamination present.
4. Notify Geotechnical Services, Inc. management of the situation, calling company personnel in the order listed below.

Name	Work Phone Number	Home Phone Number
Mel Cerny	(402) 339-6104	(402) 944-3548
Bill Odell	(816) 461-1205	(913) 381-6858
Rick Spiker	(816) 461-1205	(816) 229-3536

5. Follow the directions provided by the person contacted in step 4.
6. Geotechnical Services, Inc. Must:
 - 6.1 Arrange for a survey to be conducted as soon as possible by a knowledgeable person using appropriate radiation detection instrumentation. (This person could be a licensee associate using a survey meter located at the jobsite or a consultant.)

- 6.2 Make necessary notifications to local authorities; notify the NRC as required. (Even if not required to do so, you may report ANY incident to NRC by calling NRC's Emergency Operations Center at (301) 816-5100, which is staffed 24 hours a day and accepts collect calls. NRC notification is required when gauges containing licensed material are lost or stolen, and when gauges are damaged or involved in incidents that result in a dose in excess of 0.005 millicuries.
- 6.3 Reports must be submitted to the NRC within five (5) days.
- 6.4 Review the reporting requirements, which are found in 10 CFR 20.2201-2203 and 10 CFR 30.50.

LEAK TEST PROCEDURES

A nuclear density gauges will be leak tested every six months. Leak test results will be maintained for record and inspection using the following guidelines.

1. Original leak test results will be maintained for permanent record and inspection in the Corporate files at 5730 South 86th Circle in Omaha, Nebraska.
2. Copies of the leak test results will be maintained for permanent record and inspection at the office where the nuclear density gauge is stored.
3. Copies of the most current leak test results will be carried with the nuclear density gauge at all times.

Leak test kits will automatically be sent to you for the number of nuclear density gauges that are located in your office. The kits will have all the necessary items to test for both Cesium-137 and Am 241:Be. The contents of the leak test kit should include:

1. One pair of disposable gloves.
2. Two labeled capped plastic tubes. One tube should be labeled Port the other housing.
3. Each tube should have a cotton-tipped swab in it.

Leak test should be performed using the following instructions as a guideline.

1. Mark the label of the kit with the nuclear density gauge(source) serial number, radionuclide(Ce-137, Am 241:Be), and the date you are doing the test on.
2. Put on the disposable gloves.
3. Wipe the surface of the housing of the source(tip of the source) with the cotton swab from the plastic tube labeled housing. After wiping housing area place the cotton swab in the plastic tube and cap.
4. Wipe the surface of the port area of the gauge with the cotton swab from the plastic tube labeled port. After wiping port area place the cotton swab in the plastic tube and cap.
5. Reseal plastic tubes and disposable gloves in plastic bag and mail to Great Plains Nuclear Service.

We have contracted with the following radiological consulting firm to provide leak test kits and analyze the returned kits. The firm is:

Great Plains Nuclear Services, Inc.
4502 Leavenworth Street
Omaha, Nebraska 68106
402-553-3776

NORMAL OPERATING PROCEDURES

The following nuclear safety procedures will be observed at all times. A copy of this procedure will be maintained with the gauge in the shipping case, in the license file, as well as next to the telephone in the secretary's office.

1. During transportation:
 - a. Source Rod **SHALL BE LOCKED IN SAFE POSITION**
 - b. Storage Case lids **SHALL BE LOCKED OR PADLOCKED**
 - c. Transport case **SHALL BE CHAINED AND PADLOCKED TO THE TRANSPORT VEHICLE TO PREVENT THEFT WHILE UNATTENDED OR REMOVAL OR LOSS IN AN ACCIDENT.**
2. The **NUCLEAR GAUGE** and its shipping case will be hidden from view while in an unattended vehicle to minimize attractive nuisance value.
3. All users will wear film badges when using the Nuclear Gauge. **Badges will be stored away from gauges when not in use and will be protected from external heat.**
4. Operators will visually survey immediate work area to insure security of the Nuclear Gauge during normal operation. The Nuclear Gauge will remain in the operator's line of sight **AT ALL TIMES** during normal operation.
5. Gauges will be securely locked in storage areas when not in use. Keys will be restricted to authorized users only.
6. The Nuclear Gauge operation will be restricted to users specifically authorized in writing by the Radiation Safety Officer.
7. The Gauge will be leak tested every six months using an approved leak test kit. Results will be maintained for permanent record and inspection. The leak test will be conducted by authorized personnel making sure that the test is taken only at approved locations on the gauge.
8. Disposal of the source or the device will be done by an authorized agency only. In the event of emergency disposal, we shall contact the Troxler or CPN factory or other authorized disposal facility for instructions. The unit will be transferred only to authorized licensees for this specific device and a record of transfer will be retained in our files, with proof of license authority by the recipient, in the event of sale, trade, loan or other transfer.
9. **SHIPPING DOCUMENTS, NORMAL OPERATING PROCEDURES, EMERGENCY PROCEDURES and EMERGENCY PHONE NUMBERS** shall accompany the Nuclear Gauge at all times.
10. In the event the gauge is lost or stolen contact the **RSO** immediately. If he cannot be located, contact the local police and the public health office.
11. **IN THE EVENT OF AN EMERGENCY WITH POSSIBLE DAMAGE TO THE RADIOACTIVE SOURCE, IMPLEMENT THE FOLLOWING INSTRUCTIONS IN THE ORDER LISTED BELOW:**
 - a. **FREEZE SITE** - Stop any involved vehicles.
 - b. **RESTRICT ACCESS** within a 15-foot radius of the gauge or parts.
 - c. **IMPLEMENT EMERGENCY PROCEDURES.**

EMERGENCY PROCEDURES

THE OPERATOR MUST PROTECT HUMAN LIFE FIRST, THEN PROPERTY FROM DAMAGE TO A RADIATION INCIDENT.

We must prevent the raw radioactive material from escaping to the atmosphere or environment. The source material is encapsulated in two stainless steel, welded containers, which is further securely mounted into the gauge enclosure. It is highly unlikely that the material could escape in the event of a severe accident or fire, however, our protective program must insure that we plan for this eventuality.

In the event that a density gauge is involved in an accident, fire or explosion during transport, the following steps must be taken:

1. An area of approximately 15 feet in radius surrounding the gauge and parts, if any, must be secured to prevent entry by unauthorized persons. This area should be maintained until the condition of the gauge is evaluated.

THEN EXERCISE THE FOLLOWING DECISION POINTS:

Visually inspect the gauge to determine the extent of damage to the source housing or shielding. If applicable, the source rod should be returned to the shielded position.

A. If the enclosure is in one piece with a minor break or two in the sheet metal or casting and the source is obviously in place, at least the source location is not torn apart.

1. Turn the gauge over to view the source area, if necessary. Do not walk through the site material where the gauge was pushed or pulled.

Inspect the source area visually to insure no damage to shutter or source mounting.

2. If source area is intact, pick up the gauge, place in storage container and return to permanent storage area.
3. Call the RSO and the manufacturer for assistance in shipping the gauge back to the factory for repair or disposal.

DO NOT SHIP THE GAUGE WITHOUT FACTORY APPROVAL OR KNOWLEDGE.

B. If the gauge is broken apart, severely burned, severely crushed with parts strewn around, or the source area is visually damaged.

1. Freeze the site. Rope off the damage site for a 15 foot radius. Stop the vehicle and have the driver walk away. Do not walk through the damage site. If radioactive material is loose it can be picked up and tracked elsewhere.
2. Call the RSO, and/or the nearest public health department office for help. Call the manufacturer. The objective is to get an expert technician to the site with an operating survey meter who can determine if the radioactive material is lost or is intact.

3. The radiation expert will determine whether the site is safe, will remove the contamination, if there is any, and will prepare the gauge for shipment to the factory for repair, or disposal.
4. In the event of severe damage, it may be necessary to dispose of the source through a local disposal agency licensed for this operation. The radiation technician or local public health department will assist in this action.
5. Call the manufacturer and advise of the problem. They will want to know the circumstances to assist in possible advice to others in future training programs.

To ease the minds of operators in this regard, Campbell Pacific Nuclear has never had a damaged gauge requiring extreme security precautions, although they have had a number of gauges thoroughly run over in the years that they have manufactured units. Campbell Pacific Nuclear knows of no other manufacturer who has experienced this degree of damage.

SHIPPING PAPER PROCEDURES

one case, **RADIOACTIVE MATERIAL,**
SPECIAL FORM, N.O.S., 7, UN2974
Cs-137, 10 mCi; American 241:Beryllium, 50 mCi;
RADIOACTIVE YELLOW II Label
Transport Index 0.4
USA DOT 7A, TYPE A PACKAGE

177.817(e)

Shipping paper accessibility - accident or inspection. A driver of a motor vehicle containing hazardous material shall insure that the shipping paper required by this section is readily available to, and recognizable by, authorities in the event of accident or inspection. Specifically the driver and the carrier shall:

- (1) Clearly distinguish the shipping paper, if it is carried with other shipping papers or papers of any kind, by either distinctively tabbing it or having it appear first; and
- (2) Store the shipping paper as follows:
 - (i) When the driver is at the vehicle controls, the shipping paper shall be: (A) Within his immediate reach while he is restrained by the lap belt; and (B) either readily visible to a person entering the driver's compartment or in a holder which is mounted to the inside of the door on the driver's side of the vehicle.
 - (ii) When the driver is not at the vehicle controls, the shipping paper shall be: (A) In a holder which is mounted to the inside of the door on the driver's side of the vehicle, or (B) on the driver's seat in the vehicle.

SHIPPING PAPER

one case, **RADIOACTIVE MATERIAL,**
SPECIAL FORM, N.O.S., 7, UN2974
Cs-137, 10 mCi; American 241:Beryllium, 50 mCi;
RADIOACTIVE YELLOW II Label
Transport Index 0.4
USA DOT 7A, TYPE A PACKAGE

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 - (i) When the driver is at the vehicle controls, the shipping paper shall be: (A) Within his immediate reach while he is restrained by the lap belt; and (B) either readily visible to a person entering the driver's compartment or in a holder which is mounted to the inside of the door on the driver's side of the vehicle.
 - (ii) When the driver is not at the vehicle controls, the shipping paper shall be: (A) In a holder which is mounted to the inside of the door on the driver's side of the vehicle, or (B) on the driver's seat in the vehicle.

BILL OF LADING

SHIPPER: Geotechnical Services, Inc.
8400 East 13th Terrace
Kansas City, Missouri 64126-2378

RQ, RADIOACTIVE MATERIAL, SPECIAL FORM, NOS, UN2974, CLASS 7, TYPE
"A" PACKAGE, CONTAINING:

Cs-137, 10 mCi
Am-241:Be, 50 mCi

RADIOACTIVE YELLOW II LABEL, TI = 0.5

**EMERGENCY CONTACT: GEOTECHNICAL SERVICES, INC.: (816)461-1205
**EMERGENCY CONTACT: MISSOURI STATE PATROL: 911
**EMERGENCY CONTACT: GEOTECHNICAL SERVICES, INC.: (402)339-6104

THIS IS TO CERTIFY THAT THE ABOVE-NAMED MATERIALS ARE PROPERLY
CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN
PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE
APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION.

OFFICE MANAGER

EMERGENCY PHONE NUMBERS FOR MISSOURI

RSO:	MELVIN R. CERNY	Office:	(402) 339-6104
		Home:	(402) 944-3548
PUBLIC HEALTH	NRL Emergency Operation Center		(301) 816-5100
	HIGHWAY PATROL		911
	GREAT PLAINS NUCLEAR SERVICE	Omaha, NE	(402) 553-3776
		Omaha, NE	(402) 553-3581
	CAMPBELL PACIFIC NUCLEAR	Dublin, OH	Willie Cline (614) 766-1276
		Martinez, CA	Sean Riley (415) 228-9770
	TROXLER ELECTRONIC LABS, INC.		Emergency No.
	RESEARCH TRIANGLE PARK, INC.		(919) 839-2676
	27709		Regular No.
			(919) 549-8661
FIRE:			911
RESCUE:			911
POLICE:			911

MAY 20 1997

Meivin R. Cerny, P.E.
President/Radiation Safety Officer
Geotechnical Services, Inc.
7050 South 110th Street
Omaha, NE 68128-5716

Dear Mr. Cerny:

Enclosed is your NRC Material License Number 26-26790-01 in accordance with your request.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Not possess and use materials authorized in Items 6, 7, and 8, on the license until:
 - a. You have constructed the facilities and obtained the equipment described in the license application and supporting documentation; and
 - b. You have notified the U. S. Nuclear Regulatory Commission, Region III, ATTN: Chief, Nuclear Materials Licensing Branch, in writing, that activities authorized by the license will be initiated.
3. Notify NRC, in writing, within 30 days:
 - a. When the Radiation Safety Officer permanently discontinues performance of duties under the license or has a name change; or

302397

- b. When the mailing address listed on the license changes. (No fee is required if the location of byproduct material remains the same.)
- 4. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license:
 - a. When you decide to terminate all activities involving materials authorized under the license; or
 - b. If you decide not to complete the facility, acquire equipment, or possess and use authorized material.
- 5. Request and obtain a license amendment before you:
 - a. Change Radiation Safety Officers;
 - b. Order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;
 - c. Add or change the areas of use or address or addresses of use identified in the license application or on the license; or
 - d. Change ownership of your organization.
- 6. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Statement of Policy and Procedure for NRC Enforcement Actions. Since serious

M. Cerny

-3-

consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

Sincerely,

Original Signed By
C. dget Watson
Nuclear Materials Licensing Branch

License No. 26-26790-01
Docket No. 030-34414

DOCUMENT NAME: M:\03034414.CL7

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	DNMS/RIII								
NAME	GWatson:brt								
DATE	05/20/97 GW								

OFFICIAL RECORD COPY



May 12, 1997

Gidget Watson
Materials Licensing Section
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60532-4351

**RE: CONTROL NUMBER 302397, ADDITIONAL INFORMATION,
APPLICATION FOR MATERIAL LICENSE**

Dear Ms. Watson:

This letter and the enclosed attachments provide the additional information requested for our application for a material license.

**ITEM 7. INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM
AND THEIR TRAINING EXPERIENCE**

ASSISTANT RADIATION SAFETY OFFICER - KANSAS CITY

Frank A. Comer

Frank has a Bachelor of Science Degree in Civil Engineering from the University of Missouri in May, 1994.

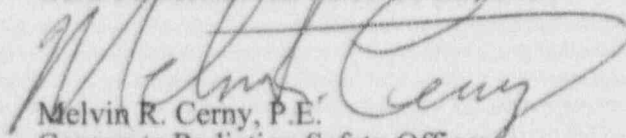
He has certificates of completion from Alpha-Omega Geotech, Inc. dated January 20, 1989 in Radiological Safety and Gauge Operation and from Troxler Electronic Laboratories, Inc. dated May 28, 1992 for the Troxler Radiation Safety Officer Course.

Frank has nine years of experience in the use of nuclear gauges as well as performing the duties of Radiation Safety Officer in the agreement states of Kansas and Nebraska.

Geotechnical Services, Inc. management makes the commitment that the Assistant Radiation Safety Officer - Kansas City has the responsibility and the authority to stop unsafe operations and will be given the time to perform his duties.

Should you have any questions concerning this information or need additional information, please contact me.

Respectfully yours,
GEOTECHNICAL SERVICES, INC.



Melvin R. Cerny, P.E.
Corporate Radiation Safety Officer
President

Enclosures

GEOTECHNICAL, MATERIALS ENGINEERING & ENVIRONMENTAL CONSULTANTS

7050 SOUTH 110TH STREET
OMAHA, NEBRASKA 68128-5716
(402) 339-6104 • FAX (402) 339-6297

OFFICES LOCATED THROUGHOUT COLORADO, IOWA, KANSAS, MISSOURI & NEBRASKA

RECEIVED
MAY 14 1997
REGION III
MAY 14 1997

TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

MELVIN R. CERNY, PRINCIPAL

of

GEOTECHNICAL SERVICES, INC.

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. | 5. Radioactivity measurement standardization and monitoring techniques and instruments. |
| 2. Leak testing procedures. | 6. Accident and incident procedures. |
| 3. Mathematics and calculations basic to the use and measurement of radioactivity. | 7. Procedures for nuclear gauge storage and transportation. |
| 4. Biological effects of radiation. | 8. General safety precautions. |

Gauge Operation

- | | |
|-------------------------|----------------------|
| 1. Instrument theory | 4. Field application |
| 2. Operating procedures | 5. Gauge calibration |
| 3. Maintenance | |


INSTRUCTOR

3/21/74
DATE


PRESIDENT

TROXLER ELECTRONIC LABORATORIES, INC., P. O. Box 5997, Phone (919) 787-5424, Raleigh, North Carolina 27607 U S A

Post-it® Fax Note	7671	Date	5/9	Pages	1
To	Frank Caniser		From	Edith	
Co./Dept.			Co.	A-06	
Phone #			Phone #		
Fax #	961-4888		Fax #		

Certificate of Completion

This Certifies that

FRANK CANISER

has successfully completed the

Troxler Radiation Safety Officer Course

conducted by the training program of

Troxler Electronic Laboratories, Inc.

Stewart Braggman
Instructor

05-28-92
Date

M.F. TROXLER
President

CERTIFICATE OF

Award

*May it be known by all who
read this that a Certificate of
Award has been presented to*

Cheryl Leutjen
SIGNED Cheryl Leutjen, Radiation Safety
Officer

FRANK ALLEN COMER

Roy J. Leonard
Roy J. Leonard, President, Alpha-Omega Geotech
for Outstanding Achievement &

Alpha-Omega Geotech, Inc.
ORGANIZATION

Accomplishment in successfully
completing the Alpha-Omega Geotech, Inc., training course for radiological safety
and Troxler nuclear gauge use.

PRESENTED THIS 20th DAY OF January, 19 89

CONVERSATION RECORD

TIME

DATE

5/8/97

☐ VISIT☐ CONFERENCE☒ TELEPHONE☐ INCOMING☒ OUTGOING

NAME OF PERSON(S) CONTACTED OR IN CONTACT

Melvin Cerny, President

ORGANIZATION (OFFICE, DEPT. ETC.)

Geotechnical Services, Inc.

TELEPHONE NO.

402/339-6104

SUBJECT

New License No. 26-26790-01

SUMMARY

I requested the following additional information in regards to Application dated March 3, 1997:

1. Training certificate of Mr. Cerny.
2. I informed Mr. Cerny that the Asst. RSO would be listed on the license, thus, I requested the actual name and experience of Asst. RSO.

Mr. Cerny stated that he would forward the information ASAP.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

ACTION TAKEN

SIGNATURE

TITLE

DATE



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION III
801 WARRENVILLE ROAD
LISLE, ILLINOIS 60532-4351

March 11, 1997

Melvin R. Cerny, P.E.
Radiation Safety Officer
Geotechnical Services, Inc.
7050 South 110th Street
Omaha, NE 68128-5716

SUBJECT: ACKNOWLEDGEMENT OF CORRESPONDENCE
(Application Dated 03/03/97)

Dear Licensee:

In response to your request, we have completed the initial processing, which is an administrative review of your application for a(n):

☒ New License ☐ Amendment ☐ Renewal
☐ Termination ☐ Auth User (Amendment not required)
☐ Other _____

No administrative deficiencies were identified during this initial review. However, it should be noted that a technical review may identify omissions in the submitted information.

It appears that your request is routine (see 1-3 below, as applicable).

1. New and amendment actions are normally processed within 90 days, unless we find major deficiencies, or policy issues requiring central program office assistance.
2. Renewal actions are normally processed within 180 days, however, under timely filing (before expiration), you may continue to operate under your existing license.
3. Termination actions are normally processed within 90 days, unless confirmatory surveys following decontamination/decommissioning activities are involved.

A copy of your correspondence has been forwarded to our Licensing Fee and Debt Collection Branch (301/415-6097) for approval of the fee category and amount, if required.

If you have a compelling safety or business-related reason for requesting expedited review, please contact the Materials Licensing Branch at (630) 829-9887. We will try to complete your request as soon as practicable. Any correspondence about this request should reference the control number.

Nuclear Materials Support Branch

Mail Control No. 302397
License No. 26-26790-01