

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.

Licensee		
1. Anchor Engineering Services, Inc.		3. License Number 06-30328-01
2. 75 Nutmeg Lane Glastonbury, Connecticut 06033		4. Expiration Date August 31, 2001
		5. Docket or Reference No. 030-34209
6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License
A. Cesium 137	A. Sealed sources	A. 100 millicuries
B. Americium 241	B. Sealed neutron sources	B. 500 millicuries
9. Authorized use		
A. and B. For possession and use in Troxler Electronic Laboratories, Inc., Campbell Pacific Nuclear Corp., Humboldt Scientific, Inc., Seaman Nuclear Corporation, or Soiltest, Incorporated devices which have been evaluated and approved for licensing purposes under a license issued by the U.S. Nuclear Regulatory Commission or any Agreement State.		

CONDITIONS

10. Licensed material may be stored at the licensee's facilities located at 75 Nutmeg Lane, Glastonbury, Connecticut and may be used only 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. 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 I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406 has been notified in writing that activities authorized by the license will be initiated.
- In accordance with the requirements set forth in 10 CFR 30.36(b), 40.42(b), and 70.38(b), the licensee shall promptly notify the Nuclear Regulatory Commission, in writing, of a decision not to complete the facility, acquire equipment, or possess and use authorized material.
12. Licensed material shall only be used by, or under the supervision and in the physical presence of, Thomas V. Sgroi 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 in writing by the Radiation Safety Officer.

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**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

06-30328-01

Docket or Reference Number

030-34209

13. The Radiation Safety Officer for this license is Thomas V. Sgroi.
14.
 - A. Sealed sources and detector cells containing licensed material shall be tested for leakage and/or contamination at intervals not to exceed six months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed three years.
 - 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 three months.
 - C. In the absence of a certificate from a transferor indicating that a leak test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
 - D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
 - E. Sealed sources and detector cells 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 transfer 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.
 - F. The 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 and the source or detector cell shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within five days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406. The report shall specify the source or detector cell involved, the test results, and corrective action taken.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

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030-34209

- G. The licensee is authorized to collect leak test samples for analysis by Troxler Electronics Laboratory. 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.
15. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
16. The licensee shall conduct a physical inventory every six months to account for all sealed sources and devices containing licensed material received and possessed under the license.
17. The licensee shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.
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. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
21. 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 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 July 16, 1996
B. Letter received August 19, 1996

Date

AUG 27 1996

For the U.S. Nuclear Regulatory Commission

Original Signed By:

By

John R. McGrath

Division of Nuclear Materials Safety
Region I

King of Prussia, Pennsylvania 19406

AUG 27 1996

License No. 06-30328-01
Docket No. 030-34209
Control No. 123494

Mark M. Zessin, President
Anchor Engineering Services, Inc.
75 Nutmeg Lane
Glastonbury, CT 06033

Dear Mr. Zessin:

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 I Office, Licensing Assistance Team, (610) 337-5093 or 5239, 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. Until your license is 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 I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406 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
 - b. when the mailing address on the license changes (no fee is required if the location of byproduct material remains the same).

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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 Officer;
 - 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 a certifying official of the licensee rather than the Radiation Safety Officer or a consultant.

You will be periodically inspected by the 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," (Enforcement Policy), NUREG 1600.

Since serious 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.

Mark M. Zessin, President
Anchor Engineering Services, Inc.

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Thank you for your cooperation.

Sincerely,

Original Signed By:
John R. McGrath

John R. McGrath
Senior Health Physicist
Division of Nuclear Materials Safety

License No. 06-30328-01
Docket No. 030-34209
Control No. 123494

Enclosures:

1. License No. 06-30328-01
2. 10 CFR Parts 2, 19, 20, 30 and 170
3. NRC Forms 3 and 313

DOCUMENT NAME: R:\WPS\MLTR\L0630328.01

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	N	DNMS/RI				
NAME	McGrath						
DATE	08/21/96	08/	/96	08/	/96	08/	/96

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Anchor Engineering Services, Inc.

75 Nutmeg Lane • Glastonbury, Connecticut 06033

Phone (860) 633-8770 • FAX (860) 633-5971



MS 16
Q-8

License No. new
Docket No. 030-34209
Control No. 123494

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

Dear Mr. McGrath:

Enclosed you will find the revised application for the use of the Troxler Moisture Density Gauge with the appropriate changes as specified in your letter dated 8/5/96. Since you did not return the cover page of the application we assume that it does not require any changes other than item 3. Item 3 has been address as part of the attachment. Thank you for your prompt review of our application.

Sincerely,

Mark M. Zessin, President
Anchor Engineering Services, Inc.

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123494
AUG 19 1996

ANCHOR ENGINEERING SERVICES INC.
75 NUTMEG LANE
GLASTONBURY, CT 06033

APPLICATION FOR THE USE OF SEALED SOURCES
IN PORTABLE GAUGING DEVICES

ITEM 3. Anchor Engineering confirms that the gauge will be permanently stored at 75 Nutmeg Lane and will be used at temporary job sites.

- ITEM 5. A. Radionuclide:
1. Cesium - 137, registered under 10 CFR 32.210, maximum activity 11 millicuries.
 2. Americium - 241, registered under 10 CFR 32.210, maximum activity 50 millicuries.

SEALED SOURCE

CS-137
50 3645
.30 GBQ(8.0MCI)

21 JUL, 1987

102112

GB/140/S

C64444

Radioactive Material
Source Serial Number
Activity
Neutron Output (NPS)
Date of Measurement
Troxler Drawing Number
Special Form Certificate
ANSI Specification

SEALED SOURCE

AM241:BE
4710254
1.49 GBQ(40MCI)
7.2X10-4
21 JUL, 1987
102451
GB/7/S
C64544

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

ITEM 6. Moisture density gauge will be used for measuring moisture and density of construction materials and will be used at depths less than or equal to 3'.

ITEM 7. Proposed RSO (Radiation Safety Officer)

A. Thomas V. Sgroi

B. Mr. Sgroi has a B.S. in Civil Engineering from the University of Hartford. He has successfully completed the Troxler Electronic Lab., Inc. training course for the use of Nuclear Testing Equipment which included the necessary radiological safety training. This course meets the criteria stated in Part I of Appendix D in Draft Regulatory Guide DG-0008 and the

instructor (Philip Palilla) meets the criteria in Part II of Appendix D of Draft Regulatory Guide DG-0008.

- C. Anchor Engineering Services has committed that the RSO is authorized to stop unsafe operation; has sufficient time to perform radiation safety duties and responsibilities.
- D. The RSO's duties and responsibilities will be those listed in Appendix C of Draft Regulatory Guide DG-0008.
- 5. See attached organizational chart.

ITEM 8. Training provided to other users.

A. Anchor Engineering Services, Inc. commits that each additional user will complete the manufacturer's course that meets the criteria in Part I of appendix D of Draft Reg. Guide DG-0008 and the course instructor's qualifications will meet the criteria in Part II of Appendix D of the Draft Reg. Guide DG-0008. In addition each user will receive a copy of the operating and emergency procedures, an annual refresher training will be provided by the in house RSO (Thomas Sgroi) The annual refresher training will cover transportation of the device to field locations, emergency procedures and operating procedures.

ITEM 9. Facilities

- A. Existing building
- B. Industrial park area
- C. See attached office building floor plan and proposed storage area.
- D. The moisture density gauge will be stored in a equipment storage closet located in an area of the building currently being used only for storage of survey equipment and office files. The storage closet will be locked with a padlock and will be marked with the appropriate radioactive safety warning signs.
- E. The gauge will be transported to jobsites in a Chevy S-10 pickup with a locking bed cap. The gauge will be secured from movement within the bed with 1/2" chains and a pad lock.
- F. The gauge will not be left unattended and will be kept under physical surveillance by the authorized user at all times while at a the temporary jobsite locations. The gauge will be returned to its permanent storage site at the end of each work day. A log will be kept at the permanent storage site so that the gauges location is always known.
- G. The gauge will not be stored at a residence.

- ITEM 10.1 Personnel Monitoring Program
1. Anchor Engineering Services, Inc. provides the following personnel monitoring program: All authorized gauge users will be monitored with a film badge.
 - a. Supplied by Troxler Electronic Lab.
 - b. The film badges will be monitored monthly.
- ITEM 10.2 Radiation Detection Instruments
1. Anchor Engineering Services, Inc. will have access to an appropriate survey meter for timely evaluation of source integrity following an incident at any jobsite. The meter will be supplied by Troxler Electronic Laboratories, Inc.
- ITEM 10.3 Leak Tests
1. Anchor Engineering will provide 1 leak test at intervals not to exceed 6 months. Anchor Engineering's RSO (Thomas Sgroi) will perform leak test with a leak test kit provided by Troxler Electronic Lab., P.O. Box 12057, 3008 Cornwalls Rd. Research Triangle Park, North Carolina 27709. Kit model No.3440. See attached sheet for leak test instructions.
- ITEM 10.4 Inventories
1. Anchor Engineering will conduct inventories at intervals not to exceed 6 months to account for all sealed sources and devices received and possessed under the license. Records will be maintained for 3 years.
- ITEM 10.5 Maintenance
1. Anchor Engineering commits that any maintenance (cleaning) will always be performed with the radioactive source in the safe shielded position in accordance with the manufactures directions or recommendations, and more extensive maintenance that requires removal of the source from its shielded position or removal of the source rod from the devise will be performed by the gauge manufacturer.
- ITEM 10.6 Transportation of Devices to Field Locations
1. Anchor Engineering will have and maintain current copies of Federal DOT regs and develop procedures to comply with DOT regs.
- ITEM 10.7 Operating/Emergency Procedures
1. Anchor Engineering commits to having and implementing operating and emergency procedures as submitted in this application.

2. Anchor Engineering will provide a copy of the operating and emergency procedures to all users before they begin using the gauge.
3. Anchor Engineering will have a copy of the operating and emergency procedures at each jobsite.
4. See attached sheet for emergency and operating procedures.

ITEM 10.8 Annual Audit of Radiation Safety Program

1. Anchor Engineering will conduct audits as described in Appendix I of Draft Reg. Guide DG-0008. Annual audits will be performed by Mark Zessin President of Anchor Engineering. Anchor Engineering's management will promptly review the documented results of audits, prompt action will be taken to correct any deficiencies and that personnel will be informed of deficiencies and corrective steps. All records of such audits will be maintained for 3 years.

ITEM 10.9 Financial Assurance and Recordkeeping for Decommissioning

1. Financial Assurance - See response to ITEM 5.
2.
 - a. Anchor Engineering Services commits to maintaining records important to decommissioning.
 - b. Records will be stored at the office of Anchor Engineering Services, Inc.

ITEM 11. Waste Management

1. The disposal of the gauge will be by transfer of the radioactive material to a person who is specifically licensed to receive and possess it.

AUG - 5 1996

License No. New
Docket No. 030-34209
Control No. 123494

Mark M. Zessin, President
Anchor Engineering Services, Inc.
75 Nutmeg Lane
Glastonbury, CT 06033

Dear Mr. Zessin:

This is in reference to your application dated July 16, 1996 for a license to use Troxler moisture density gauges. In order to continue our review, we need the following additional information:

1. In Item 3. of your application, you indicate that the gauge will be permanently stored at 75 Nutmeg Lane. Confirm that you wish to use the gauge at temporary job sites.
2. In paragraph C. of Item 5 of your application, you state that "Anchor Engineering Services has committed that the RSO is unauthorized to stop unsafe operations..." Please clarify.
3. With regard to your training program, please provide additional commitments that 1) each user will receive a copy of the operating and emergency procedures, 2) each user will be designated in writing by the Radiation Safety Officer, 3) annual refresher training will be provided (include information on the topics to be covered and the instructor's qualifications), and 4) records of each user's training will be kept for 3 years.
4. With regard to Item 10.2 of your application, provide a more detailed explanation regarding timely access to a survey meter in case of an incident, i.e. where, specifically, you will obtain the meter.
5. With regard to your annual audits, provide the name and qualifications of the individual to perform the audits. Confirm that management will promptly review the documented results of audits, that prompt action will be taken to correct deficiencies and that personnel will be informed of deficiencies and corrective steps. Also confirm that records of such audits will be maintained for 3 years.

We will continue our review upon receipt of this information. Please reply in duplicate to my attention at the Region I Office and refer to Mail Control No. 123494. If you have any technical questions regarding this deficiency letter, please call me at (610) 337-5069.

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Mark M. Zessin, President
Anchor Engineering Services, Inc.

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If we do not receive a reply from you within 30 calendar days from the date of this letter, we shall assume that you do not wish to pursue your application.

Sincerely,

ORIGINAL SIGNED BY:

John R. McGrath
Senior Health Physicist
Division of Nuclear Materials Safety

License No. New
Docket No. 030-34209
Control No. 123494

DOCUMENT NAME: R:\WPS\DLTR\L0630328.01

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OFFICE	DNMS/RI	<input checked="" type="checkbox"/> N	DNMS/RI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME	McGrath <i>JRM</i>						
DATE	08/05/96	08/	/96	08/	/96	08/	/96

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(10-94)
10 CFR 30, 32, 33
34, 35, 36, 39 and 40

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 9 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.

APPLICATION FOR MATERIAL LICENSE

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

LL 30328
030-34209
03121

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)

Anchor Engineering Services, Inc.
75 Nutmeg Lane
Glastonbury, CT 06033

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

The gauge will be permanently stored at Anchor
Engineering Services, 75 Nutmeg Lane, Glastonbury
Route 2 East from Hartford, Hebron Ave. exit,
left onto Hebron Ave., 1st right onto Oak St.,
second right onto Nutmeg Lane.

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Thomas V. Sgroi

TELEPHONE NUMBER
(860) 633-8770

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(S) 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. LICENSEE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY

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.

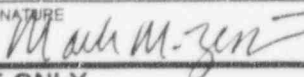
THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39 AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT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

Mark M. Zessin, P.E. President

SIGNATURE



DATE

7/16/96

FOR NRC USE ONLY

TYPE OF FEE	FEE LOG	FEE CATEGORY	AMOUNT RECEIVED	CHECK NUMBER	COMMENTS
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123494

APPROVED BY

DATE

JUL 25 1996

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ANCHOR ENGINEERING SERVICES INC.
75 NUTMEG LANE
GLASTONBURY, CT 06033

APPLICATION FOR THE USE OF SEALED SOURCES
IN PORTABLE GAUGING DEVICES

- ITEM 5. A. Radionuclide:
1. Cesium - 137, registered under 10 CFR 32.210, maximum activity 11 millicuries.
 2. Americium - 241, registered under 10 CFR 32.210, maximum activity 50 millicuries.

SEALED SOURCE

CS-137
50 3645
.30 GBQ(8.0MCI)

21 JUL, 1987
102112
GB/140/S
C64444

Radioactive Material
Source Serial Number
Activity
Neutron Output (NPS)
Date of Measurement
Troxler Drawing Number
Special Form Certificate
ANSI Specification

SEALED SOURCE

AM241:BE
4710254
1.49 GBQ(40MCI)
7.2X10-4
21 JUL, 1987
102451
GB/7/S
C64544

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

- ITEM 6. Moisture density gauge will be used for measuring moisture and density of construction materials and will be used at depths less than or equal to 3'.

- ITEM 7. Proposed RSO (Radiation Safety Officer)
- A. Thomas V. Sgroi
- B. Mr. Sgroi has a B.S. in Civil Engineering from the University of Hartford. He has successfully completed the Troxler Electronic Lab., Inc. training course for the use of Nuclear Testing Equipment which included the necessary radiological safety training. This course meets the criteria stated in Part I of Appendix D in Draft Regulatory Guide DG-0008 and the instructor (Philip Palilla) meets the criteria in Part II of Appendix D of Draft Regulatory Guide DG-0008.

- C. Anchor Engineering Services has committed that the RSO is unauthorized to stop unsafe operation; has sufficient time to perform radiation safety duties and responsibilities.
- D. The RSO's duties and responsibilities will be those listed in Appendix C of Draft Regulatory Guide DG-0008.
- 5. See attached organizational chart.

ITEM 8. Training provided to other users.

- A. Anchor Engineering Services, Inc. commits that each additional user will complete the manufacturer's course that meets the criteria in Part I of appendix D of Draft Reg. Guide DG-0008 and the course instructor's qualifications will meet the criteria in Part II of Appendix D of the Draft Reg. Guide DG-0008. See attached certificate for RSO - Thomas Sgroi.

ITEM 9. Facilities

- A. Existing building
- B. Industrial park area
- C. See attached office building floor plan and proposed storage area.
- D. The moisture density gauge will be stored in a equipment storage closet located in an area of the building currently being used only for storage of survey equipment and office files. The storage closet will be locked with a padlock and will be marked with the appropriate radioactive safety warning signs.
- E. The gauge will be transported to jobsites in a Chevy S-10 pickup with a locking bed cap. The gauge will be secured from movement within the bed with 1/2" chains and a pad lock.
- F. The gauge will not be left unattended and will be kept under physical surveillance by the authorized user at all times while at a the temporary jobsite locations. The gauge will be returned to its permanent storage site at the end of each work day. A log will be kept at the permanent storage site so that the gauges location is always known.
- G. The gauge will not be stored at a residence.

ITEM 10.1 Personnel Monitoring Program

- 1. Anchor Engineering Services, Inc. provides the following personnel monitoring program: All authorized gauge users will be monitored with a film badge.
 - a. Supplied by Troxler Electronic Lab.

b. The film badges will be monitored monthly.

- ITEM 10.2 Radiation Detection Instruments
1. Anchor Engineering Services, Inc. will have access to an appropriate survey meter for timely evaluation of source integrity following an incident at any jobsite.
- ITEM 10.3 Leak Tests
1. Anchor Engineering will provide 1 leak test at intervals not to exceed 6 months. Anchor Engineering's RSO (Thomas Sgroi) will perform leak test with a leak test kit provided by Troxler Electronic Lab., P.O. Box 12057, 3008 Cornwalls Rd. Research Triangle Park, North Carolina 27709. Kit model No.3440. See attached sheet for leak test instructions.
- ITEM 10.4 Inventories
1. Anchor Engineering will conduct inventories at intervals not to exceed 6 months to account for all sealed sources and devices received and possessed under the license. Records will be maintained for 3 years.
- ITEM 10.5 Maintenance
1. Anchor Engineering commits that any maintenance (cleaning) will always be performed with the radioactive source in the safe shielded position in accordance with the manufactures directions or recommendations, and more extensive maintenance that requires removal of the source from its shielded position or removal of the source rod from the devise will be performed by the gauge manufacturer.
- ITEM 10.6 Transportation of Devices to Field Locations
1. Anchor Engineering will have and maintain current copies of Federal DOT regs and develop procedures to comply with DOT regs.
- ITEM 10.7 Operating/Emergency Procedures
1. Anchor Engineering commits to having and implementing operating and emergency procedures as submitted in this application.
 2. Anchor Engineering will provide a copy of the operating and emergency procedures to all users before they begin using the gauge.
 3. Anchor Engineering will have a copy of the operating and emergency procedures at each jobsite.
 4. See attached sheet for emergency and operating procedures.
- ITEM 10.8 Annual Audit of Radiation Safety Program

1. Anchor Engineering will conduct audits as described in Appendix I of Draft Reg. Guide DG-0008.

ITEM 10.9 Financial Assurance and Recordkeeping for Decommissioning

1. Financial Assurance - See response to ITEM 5.
2.
 - a. Anchor Engineering Services commits to maintaining records important to decommissioning.
 - b. Records will be stored at the office of Anchor Engineering Services, Inc.

ITEM 11. Waste Management

1. The disposal of the gauge will be by transfer of the radioactive material to a person who is specifically licensed to receive and possess it.

TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

THOMAS V. SGROI

of

H.W. LOCHNER ENGINEERING

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 | |

CERTIFICATE #: 056470

1/28/93

WILLIAM F. TROXLER

INSTRUCTOR

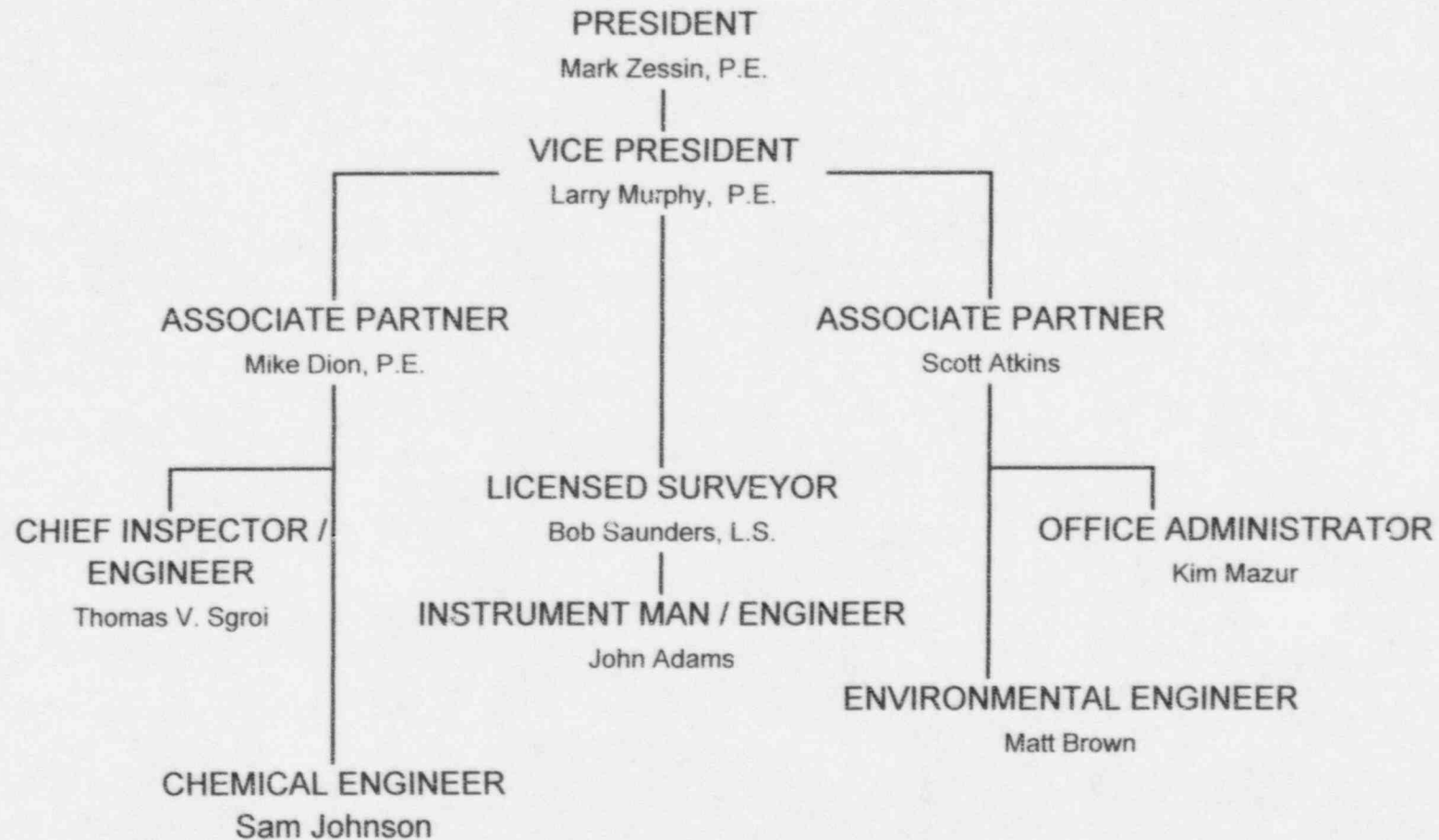
DATE

PRESIDENT

Philip Palilla
PHILIP PALILLA

ANCHOR ENGINEERING SERVICES, INC.

ORGANIZATIONAL CHART



TROXLER LEAK TEST KIT PROCEDURES

1. Remove the paper filter from the envelope and write the following information on the filter:
A. Gauge Model and Serial Number
B. Date

(USE A PENCIL! Do not use a ball point pen, felt tip, or any other type of ink. Ink will smear when Radiac Wash is applied to the filter.)

2. Remove the tongs supplied with the kit and grasp the filter, adding a few drops of the Radiac Wash to the filter. Use care to not oversaturate the filter.
3. Hold the filter paper with the tongs. Use the wooden dowel to apply downward pressure on the filter and wipe the designated areas of the instrument. Wipe the side of the filter where the model and serial numbers are written. For locations of wipe points, refer to the gauge user's manual.
4. Allow the filter wipe to dry before placing the wipe in the plastic bag provided. Do not fold the wipe.
5. Completed the form with attached carbon copies. Remove and retain the customer copy of the form for your records. Submit the form along with the wipe to the following address:

Troxler Radiation Monitoring Services
P.O. Box 12057
Research Triangle Park, North Carolina 27709

ANCHOR ENGINEERING SERVICES, INC.

MOISTURE DENSITY GAUGE

EMERGENCY PROCEDURES

IN THE EVENT OF PHYSICAL DAMAGE TO THE GAUGE, THE FOLLOWING STEPS MUST BE TAKEN:

1. Locate the source(s).
2. An area 15 feet in radius from the gauge must be sealed or cordoned off to prevent entry by unauthorized persons.
3. If a vehicle is involved, it must not be moved until the extent of the contamination (if any) of the vehicle is determined.
4. Make a visual inspection of the gauge to determine whether any damage to the source housing or shield has been sustained.
5. As soon as possible, after the situation has been stabilized and is under control, notify the RSO (Thomas Sgroi) at (860) 633-8770. Describe the present existing conditions and follow the instructions of the Radiation Safety Office.

IN THE EVENT THAT THE GAUGE IS LOST OR STOLEN, THE RADIATION SAFETY OFFICER LISTED ABOVE IS TO BE NOTIFIED IMMEDIATELY.

ANCHOR ENGINEERING SERVICES, INC.

MOISTURE DENSITY GAUGE OPERATING PROCEDURES

TRANSPORTATION OF EQUIPMENT

1. All possible means shall be provided to ensure that the equipment is fully secured in the transporting vehicle and the equipment is away from the passenger compartment. When transporting in an enclosed vehicle, the vehicle will be locked. When transporting in an open bed vehicle, the gauge will be securely fastened and locked to the bed. In any situation, the case should be blocked and braced to prevent shifting.
2. The gauge will be transported in the Troxler transportation case. The U.S. Department of Transportation requires the case to be properly labeled.
3. At all times during transport, the operator must have a properly completed Bill of Lading and Emergency Procedures for each gauge.

UTILIZATION PROCEDURES

1. When the gauge is in the field, the authorized user must maintain control over the gauge at all times. The gauge must never be left unattended.
2. When not taking measurements, the gauge should be placed in the transportation case and returned to its permanent storage area as soon as possible. The gauge is to be used only for its intended purpose. By doing so, any radiation exposure will be as low as reasonably achievable.
3. When using the equipment, the authorized or designated user will wear the personnel monitoring device that has been assigned to him. When not using the equipment, the individual's personnel monitoring device is to be stored in a designated radiation free area.

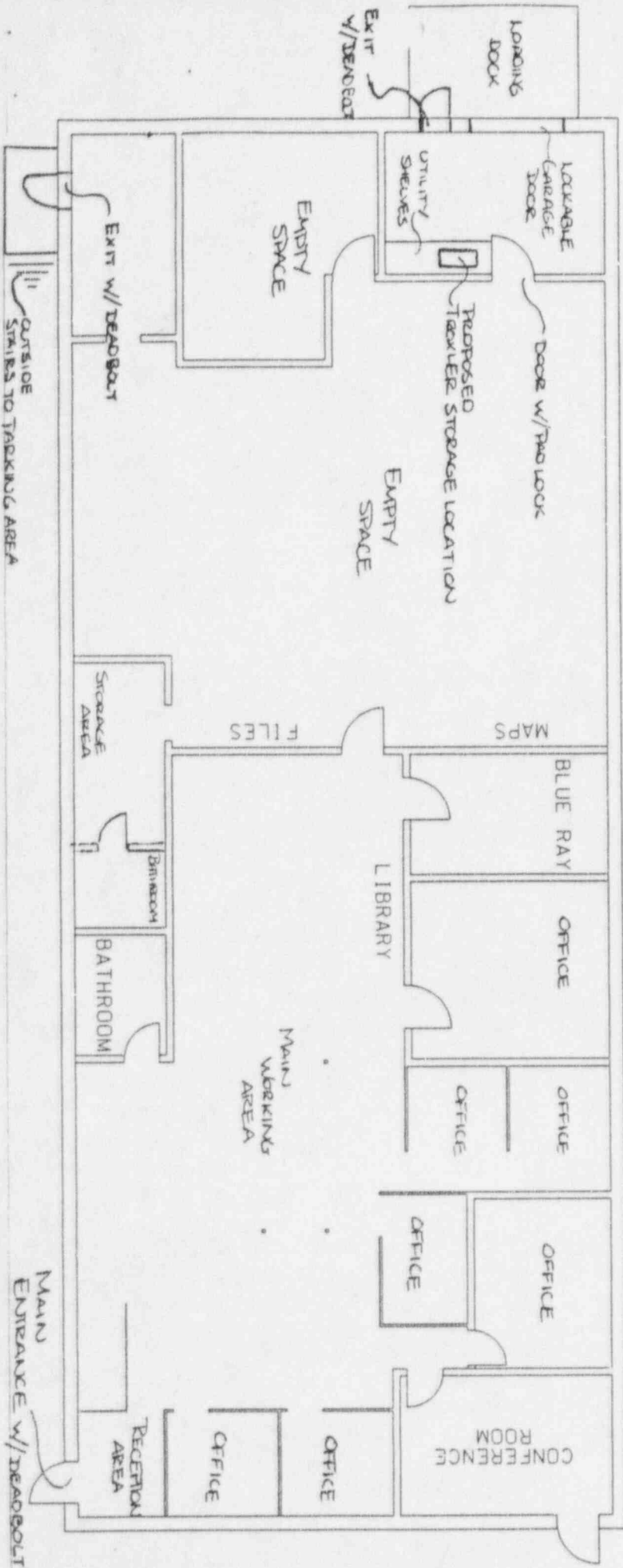
MAINTENANCE AND LEAK TEST PROCEDURES

1. Periodic maintenance includes cleaning the gauge. During maintenance, the person performing the maintenance must wear his own personnel monitoring device.
2. No maintenance is to be performed that includes removal of the source(s) from the gauge. For this type of maintenance, the gauge must be returned to the Troxler Service Department.
3. The leak test is to be performed using the Troxler Model 3880 Leak Test Kit, according to instruction accompanying the kit. During any maintenance, the person performing the maintenance must wear his own personnel monitoring device. Gauges must be leak tested at intervals not exceeding six (6) months.

ANCHOR ENGINEERING SERVICES OFFICE BUILDING

GENERAL FLOOR PLAN

SCALE 1" = 10'



123494

OFFICIAL RECORD COPY ML 10

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:      (FOR LFMS USE)
:      INFORMATION FROM LTS
:      -----
:
:      PROGRAM CODE: 03121
:      STATUS CODE: 3
:      FEE CATEGORY: -----
:      EXP. DATE: 0
:      FEE COMMENTS: -----
:      DECOM FIN ASSUR REQD: ..
:      .....

```

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

A. REGION *I*

1. APPLICATION ATTACHED

APPLICANT/LICENSEE: ANCHOR ENGINEERING

RECEIVED DATE: 960725

DOCKET NO: 3034209

CONTROL NO.: 123494

LICENSE NO.:

ACTION TYPE: NEW LICENSEE

3. COMMENTS

SIGNED W. A. Perkins
DATE 7/25/96

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED ☒)

1. FEE CATEGORY AND AMOUNT: 3P 8JJ0

2. CORRECT FEE PAID- APPLICATION MAY BE PROCESSED FOR:
AMENDMENT -----
RENEWAL -----
LICENSE -----

3. OTHER

SIGNED _____
DATE _____

Log _____ Aug 5 _____ 90

Rechner _____

Check No. 244 _____

Amount \$ 5.00 _____

Fee Category 3P _____

Type of Fee All _____

Date Check Rec'd 8/5/90 _____

Date Cleared _____

AS