

APPLICATION FOR BYPRODUCT MATERIAL LICENSE
INDUSTRIAL

30-19185

X a. NEW LICENSE

b. AMENDMENT TO:
LICENSE NUMBER

03120

c. RENEWAL OF:
LICENSE NUMBER

with 19747

See attached instructions for details.

Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.

2. APPLICANT'S NAME (Institution, firm, person, etc.)

Egin Corporation
Consulting Engineers

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
814-255-6735

3. NAME AND TITLE OF PERSON TO BE CONTACTED
REGARDING THIS APPLICATION

Richard W. Brehm, Sr. Vice President

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
814-255-6735

4. APPLICANT'S MAILING ADDRESS (Include Zip Code)

(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)

1780 Goucher Street
Johnstown, PA 15905

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED

(Include Zip Code) At the address listed in Item #4 and at temporary jobsites throughout the U.S. anywhere the U.S.N.R.C. maintains jurisdiction over by product materials.

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL

(See Items 16 and 17 for required training and experience of each individual named below)

RECEIVED BY LFMB

FULL NAME	TITLE	Date	Log	By	Orig To
a. Robert A. Calik	Inspector/Designer	5/14/81	May PG 27L	Brown	5/15/81
b. Ronald L. Walker	Inspector/Designer				
c.					

7. RADIATION PROTECTION OFFICER

Robert A. Calik

Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15. See attached sheets for these responsibilities under Item 15.

8. LICENSED MATERIAL

LINE NO.	ELEMENT AND MASS NUMBER	CHEMICAL AND/OR PHYSICAL FORM	NAME OF MANUFACTURER AND MODEL NUMBER (If Sealed Source)	MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME
(1)	CS 137	Sealed Source	As per Troxler Drawing #A-102112	No single source to exceed 9mCi
(2)	Am 241:Be	Sealed Source	As per Troxler Drawing #A-102451	No single source to exceed 40mCi
(3)				
(4)				

DESCRIBE USE OF LICENSED MATERIAL

(1) For use in Troxler Model 3411B surface moisture density gauge to measure properties of construction materials.

(3) 8610020192 860829
REQ1 LIC30
37-19747-01 PDR

Applicant: 01017
Check No.: 01017/110(3L)
Amount: Fee Category: APPLICATION
Type of Fee: APPLICATION
Date Check Rec'd: 5/14/81
Received By: BROWN

INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

See attachment No. 2 thru 5 for item 15. See attachment No. 6 for item 16.

15. **RADIATION PROTECTION PROGRAM.** Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures *(if needed)*, day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.

16. **FORMAL TRAINING IN RADIATION SAFETY.** Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.
 - a. Principles and practices of radiation protection.
 - b. Radioactivity measurement standardization and monitoring techniques and instruments.
 - c. Mathematics and calculations basic to the use and measurement of radioactivity.
 - d. Biological effects of radiation.

17. **EXPERIENCE.** Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

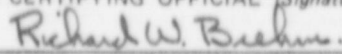
NONE

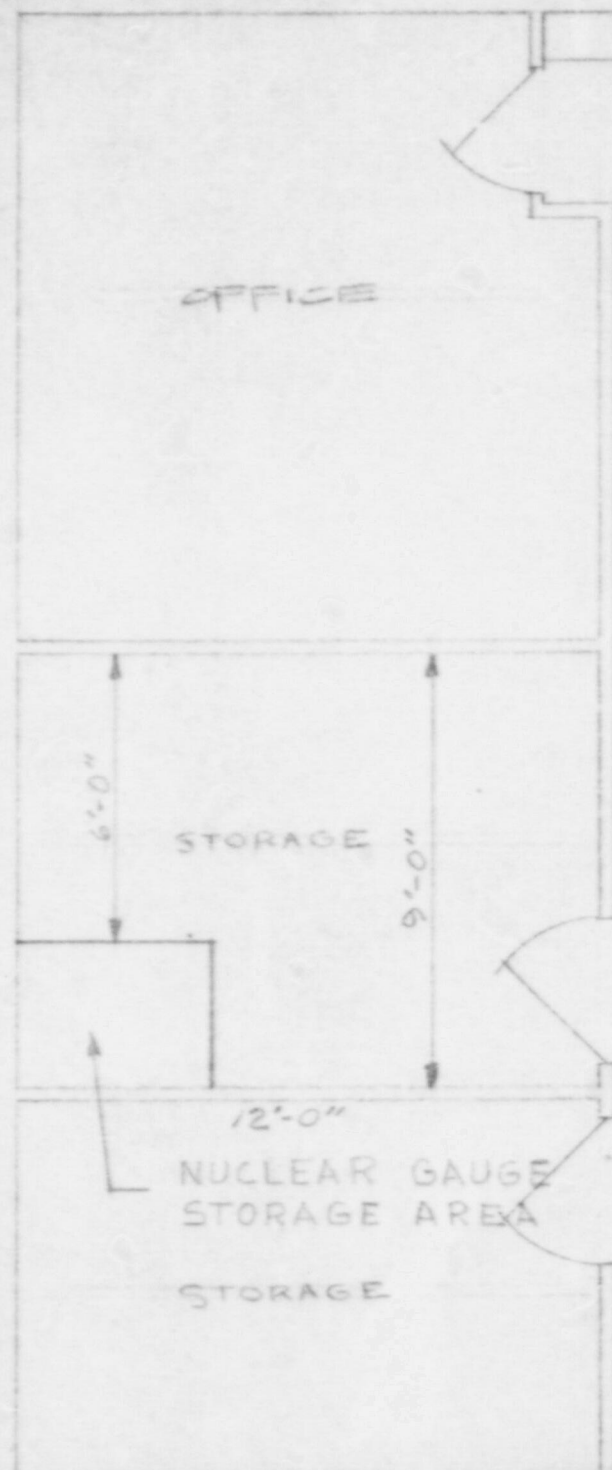
18. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

WARNING.—18 U.S.C., Section 1001; Act of June 25, 19'8; 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.

a. LICENSE FEE REQUIRED <i>(See Section 170.31, 10 CFR 170)</i> \$110.00	b. CERTIFYING OFFICIAL <i>(Signature)</i> 
	c. NAME <i>(Type or print)</i> Richard W. Brehm
(1) LICENSE FEE CATEGORY: Application - new license	d. TITLE Senior Vice President
(2) LICENSE FEE ENCLOSED: \$ 110.00	e. DATE 4/30/81



Security procedures for preventing unauthorized removal of the gauges from the storage area and temporary job-sites are as follows:

1. The permanent storage area will be secured with a lockable wood door and only authorized personnel will have access to this area.
2. The gauges would be returned to the permanent storage area after the end of the work day. If this would not be possible, then a temporary secured storage area would be obtained at the job-site. The temporary storage area would be a lockable cabinet inside a lockable job trailer or shed.

MISCELLANEOUS
SPACE

TI
APERTURE
CARD

Also Available On
Aperture Card

10-2610200198

ATTACHMENT NO. 1

TELETYPE

RECORDS

PRINTING

SCALE 1" = 1/4"

TI
APERTURE
CARD

Also Available On
Aperture Card

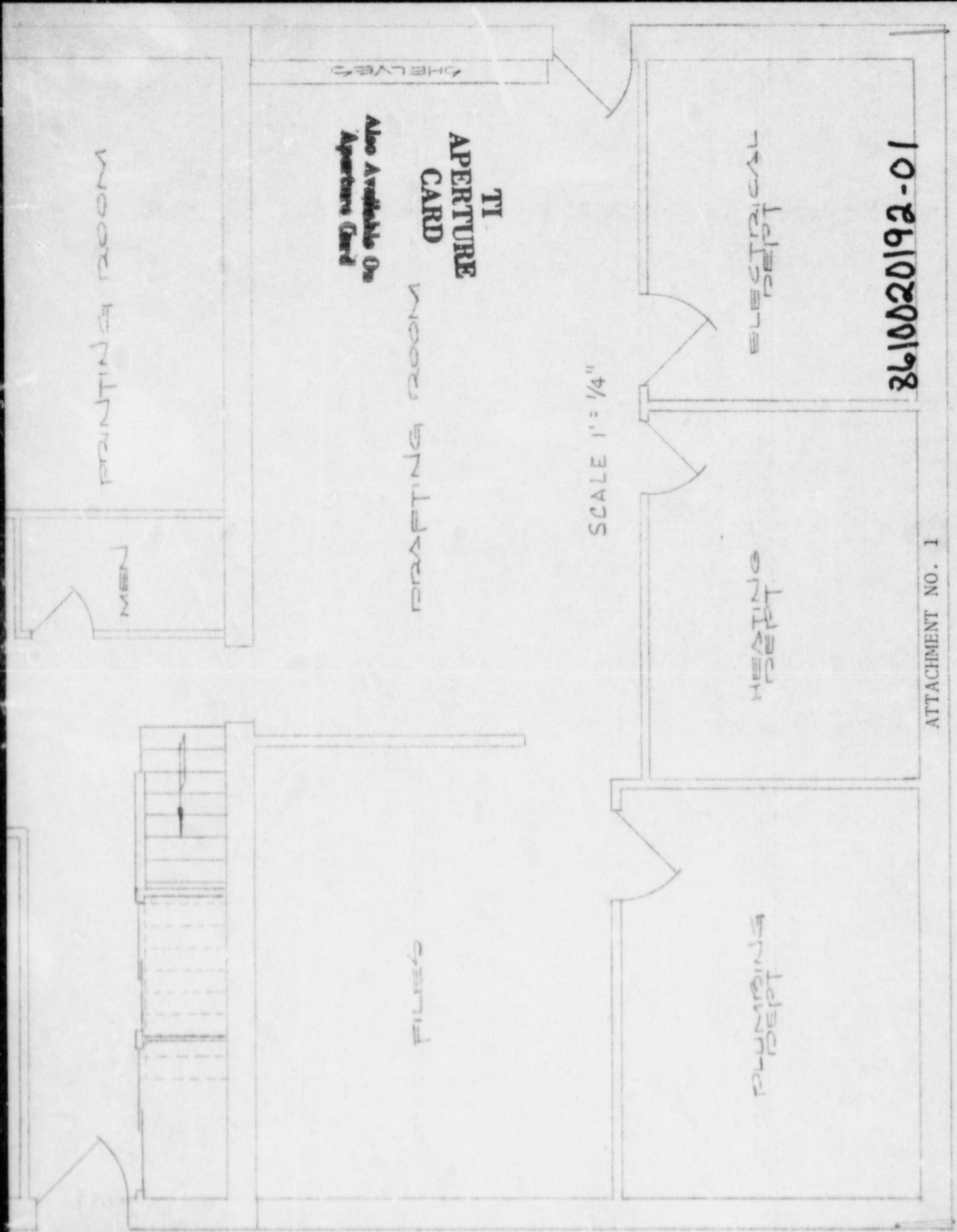
PRINTING ROOM

FILES

SHELVES

PRINTING ROOM

2



15 RADIATION PROTECTION PROGRAM

A. HANDLING PROCEDURES

1. No one shall operate, attempt to operate, or transport the instrument unless you have been authorized to do so.
2. The source shall be kept in a "safe" or stored position when not in use.
3. Wear a film badge or other dose measurement device when using or transporting the instrument (if required).
4. While exposure dose levels are well within limits for radiation workers, never expose yourself to the bare source without sufficient reason for justification of the additional dose.
5. Keep all unauthorized persons out of the operating area. A suggested distance is 5 meters or 15 feet. The general public must not be unnecessarily exposed to radiation.
6. At all times the gauge shall be secured against unauthorized removal. Not only is it an expensive piece of equipment, but if stolen, could be abandoned under conditions which could be hazardous.
7. Insure that the gauge has had leak tests performed at the intervals required by the Radioactive Materials License.
8. If there are any doubts about use of the instrument, ASK. The Radiological Safety Officer either knows the answer or will obtain one.

B. SECURITY

Locks shall be maintained on the equipment to prevent accidental exposure of the sealed source when not under the direct supervision of authorized personnel. In addition, storage containers shall be physically secured to prevent tampering or removal by unauthorized personnel.

C. PERSONNEL MONITORING

If personnel monitoring is required, no person shall use equipment unless he is in possession of the appropriate form of dosimetry.

D. RECORDS AND REPORTS

1. A bi-annual physical inventory to account for all sealed sources received and possessed under the license shall be

performed. The inventory record shall be maintained for inspection.

2. All sealed sources shall be leak tested at the interval required by the license. When transferred, in the absence of a leak test certificate, the source shall not be put into use until so tested.
3. Reports from the dosimetry service shall be maintained for inspection.
4. When an individual terminates employment, a record of his total received dose shall be made available to the employee on request.

E. INCIDENTS

1. Immediate telephone notification shall be made to the following in the event of loss of a sealed source, whether accidental or due to theft.
 - A. Company Radiological Safety Officer
 - B. U.S. NRC Regional Office, if applicable
 - C. State Health Department
Radiological Protection Division, if applicable
 - D. Local Authorities
Fire, police, or state highway patrol, if necessary
 - E. Troxler Electronic Laboratories, if necessary

Within 30 days after the loss, a written report must be filed giving detailed description of the source, circumstances of the loss, statement of disposition, possible radiation exposures or hazard, actions taken to recover the source, and procedures which will be implemented to prevent a recurrence of the loss or theft.

2. Any exposure of operators which exceeds the limits given in 10 CFR part 20 or the agreement state regulations shall be reported detailing circumstances of the exposure and possible injury.

F. EMERGENCY PROCEDURES

1. In the event of physical damage to a gauge, an exclusion area with a radius of fifteen (15) feet around the gauge shall be maintained until the extent of source damage (if any) is determined. If a vehicle is involved, it must be stopped and remain stopped until the extent of contamination hazard (if any) is determined. If visual examination of the instrument and source indicates damage to the source, including fracture of the weld, the appropriate authorities and Troxler Electronic Laboratories, Inc. should be notified. The instrument may be removed from the site by using a shovel or other long handled instrument and placed in a suitable

container such as a metal drum.

2. In the event of source leakage or separation (real or suspected) of a source from its normal containment, the 15 feet exclusion area shall be maintained until the arrival of the appropriate authorities.
3. If the rod containing the source becomes separated from the gauge, the rod will be picked up using pliers or tongs and inserted into top of the instrument, thus providing shielding. The rod shall then be secured in place using tape to prevent accidental unshielding of the source.

G. TRANSPORT BY PRIVATE MOTOR VEHICLE

The equipment, in its container, may be transported by motor vehicle under the "YELLOW II" label without placarding the vehicle as required by 49 CFR 177.823.

The device shall be locked and its container placed in a portion of the vehicle which can be locked. When not in transit, the equipment shall be stored in a secured area.

Since the container has a Transport Index of 0.1 or greater, it may not be stored less than 30 centimeters from passengers per 40 CFR 174.586. It also shall not be stored for more than 8 hours at less than 1 meter from undeveloped film.

H. LEAK TESTS

Tests for leakage shall be performed utilizing the Troxler Model 3880 Leak Test Kit or other approved equal.

I. RADIATION PROTECTION OFFICER RESPONSIBILITIES ARE:

1. Coordinate the safe use of the gauges
2. Assure compliance with the requirements of Title 10 CFR Parts 19, 20 or applicable state regulations, and all applicable US DOT regulations.
3. Assure byproduct materials possessed under the license are in conformity to materials listed on the license.
4. Assure that use of devices (particularly in the field) is only by persons named as users under the license of persons who have completed acceptable training.
5. Assure all users wear personnel monitoring (when required) while using gauges.

6. Assure gauges are properly secured against unauthorized removal at all times.
7. Serve as point of contact and give assistance in case of emergency to insure that all proper authorities are notified promptly in case of accidents.
8. Assure that terms and conditions of the license are met such as:
 - A. Periodic leak tests are performed.
 - B. All required records are kept and reviewed periodically for compliance with regulations: these include source certificates, leak test reports, personnel exposure reports, and records of transfer of radioactive materials.

Robert A. Calik and Ronald L. Walker have successfully completed the Troxler Electronic Laboratories, Incorporated (Instructor-Allan Eckard) training course for the use of nuclear testing equipment. Course taught on April 13 and April 14, 1981 in Pittsburgh, Pennsylvania.

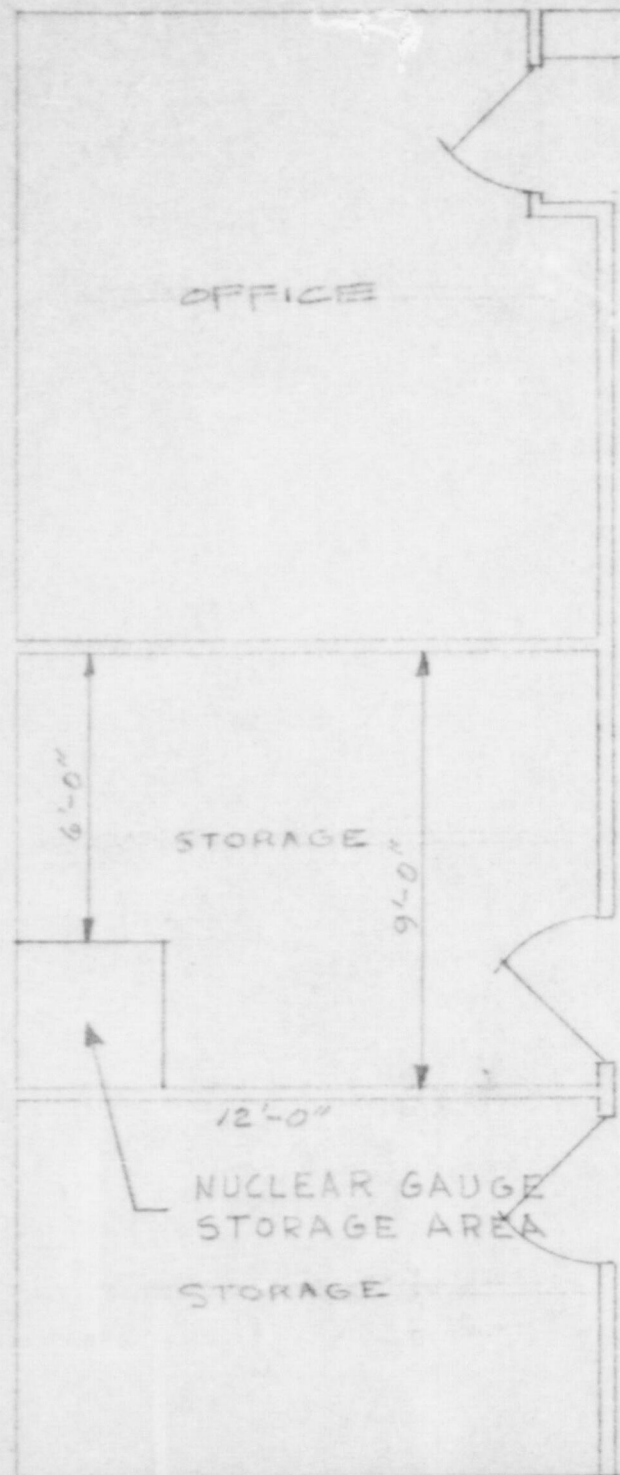
Subjects included in this course were as follows:

RADIOLOGICAL SAFETY

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

GAUGE OPERATION

1. Instrument theory.
2. Operating procedures.
3. Maintenance.
4. Field Application.
5. Gauge application.



SHELVES

OFFICE

STORAGE

NUCLEAR GAUGE
STORAGE AREA

STORAGE

6'-0"

9'-0"

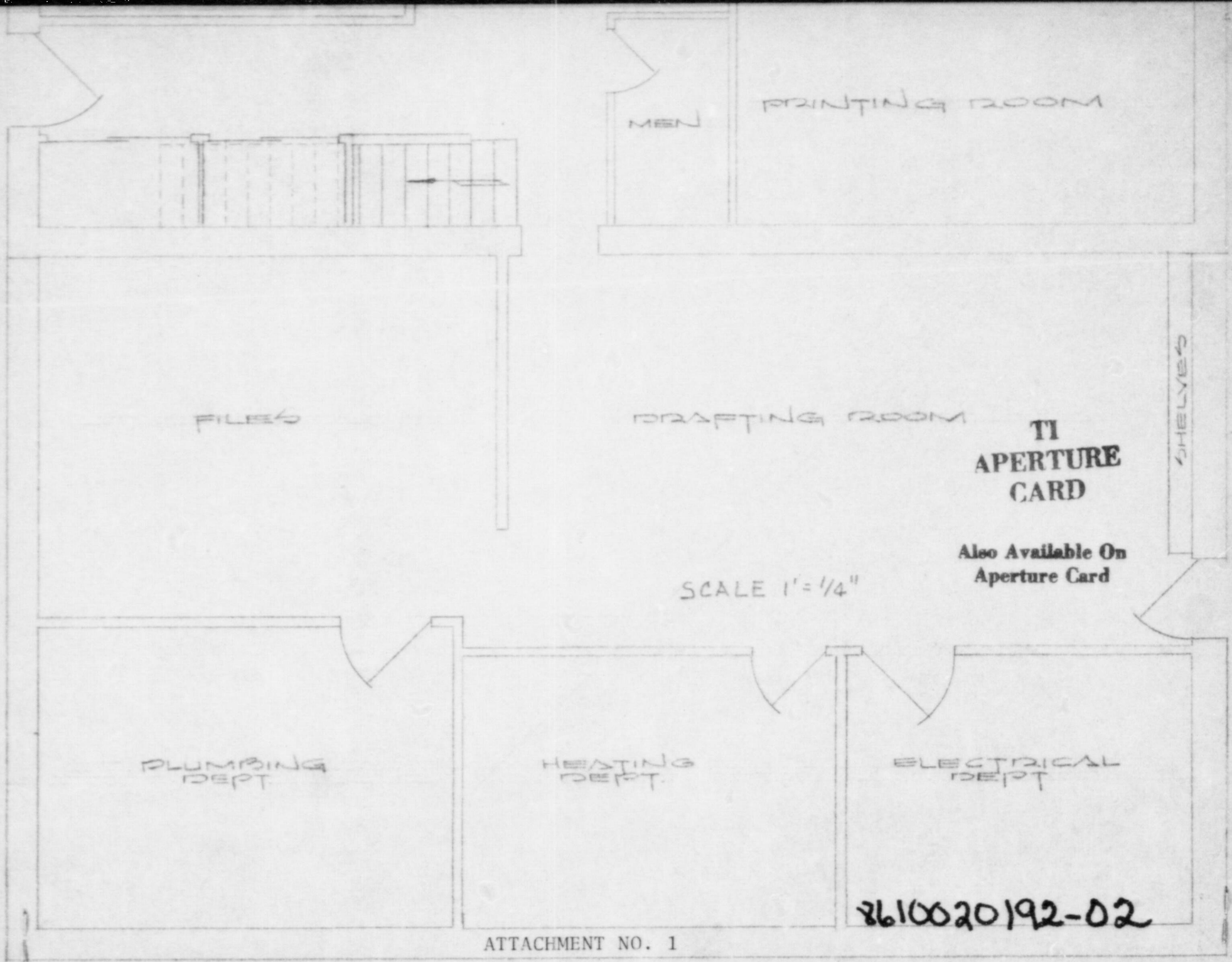
12'-0"

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MISCELLANEOUS
SPACE





ATTACHMENT NO. 1

8610020192-02

GET-EEA: William O. Miller, Chief
License Fee Management Branch
Office of Administration

John E. Glenn, Chief
Nuclear Materials Section B
Division of Engineering and
Technical Programs

X
03019185
03121
6186.

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee: Egin Corporation
Application Dated: 3/26/86
Control No.: 105326
License No.: 37-19747-01

2. FEE ATTACHED

Amount: \$ 110.00
Check No.: 03540

3. COMMENTS

Signed Brenda Platchek
Date 4/14/86

B. LICENSE FEE MANAGEMENT BRANCH

1. Fee Category and Amount: 3P \$120

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

Amendment _____
Renewal ✓ _____
License _____

Signed Kimberly
Date 7/10/86