

UNITED STATES ATOMIC ENERGY COMMISSION
APPLICATION FOR BYPRODUCT MATERIAL LICENSE

INSTRUCTIONS.—Complete Items 1 through 16 if this is an initial application or an application for renewal of a license. Information contained in previous applications filed with the Commission with respect to Items 8 through 15 may be incorporated by reference provided references are clear and specific. Use supplemental sheets where necessary. Item 16 must be completed on all applications. Mail two copies to: U.S. Atomic Energy Commission, Washington, D.C., 20545, Attention: Materials Branch, Directorate of Licensing. Upon approval of this application, the applicant will receive an AEC Byproduct Material License. An AEC Byproduct Material License is issued in accordance with the general requirements contained in Title 10, Code of Federal Regulations, Part 30, and the Licensee is subject to Title 10, Code of Federal Regulations, Part 20, and the license fee provisions of Title 10, Code of Federal Regulations, Part 170. The license fee category should be stated in Item 16 and the appropriate fee enclosed. (See Note in Instruction Sheet).

1. (a) NAME AND STREET ADDRESS OF APPLICANT. (Institution, firm, hospital person, etc. Include ZIP Code and telephone number.)

Health Education & Welfare
Indian Health Service
Puget Sound Service Unit
1212 So. Judkins
Seattle, Washington 98144
-442-5770

(b) STREET ADDRESS(ES) AT WHICH BYPRODUCT MATERIAL WILL BE USED. (If different from 1(a). Include ZIP Code.)

At various temporary job sites within
the jurisdiction of the U.S.N.R.C.

L4L 18301

2. DEPARTMENT TO USE BYPRODUCT MATERIAL

Sanitation Facilities Construction Branch

3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)

None

30-14813

03120

4. INDIVIDUAL USER(S). (Name and title of individual(s) who will use or directly supervise use of byproduct material. Give training and experience in Items 8 and 9.)

Randy Willard/Sr. Field Engineer

5. RADIATION PROTECTION OFFICER. (Name of person designated as radiation protection officer if other than individual user. Attach resume of his training and experience as in Items 8 and 9.)

Same as 4

6. (a) BYPRODUCT MATERIAL. (Elements and mass number of each.)

Cesium 137

Americium 241:
Beryllium

(b) CHEMICAL AND/OR PHYSICAL FORM AND MAXIMUM NUMBER OF MILLICURIES OF EACH CHEMICAL AND/OR PHYSICAL FORM THAT YOU WILL POSSESS AT ANY ONE TIME. (If sealed source(s), also state name of manufacturer, model number, number of sources and maximum activity per source.)

Sealed source as per Troxler drawing #A-102112
Maximum of 8 mCi per source.

Sealed source as per Troxler drawing #A-102451.
Maximum of 40 mCi per source.

7. DESCRIBE PURPOSE FOR WHICH BYPRODUCT MATERIAL WILL BE USED. (If byproduct material is for "human use," supplement A (Form AEC-313a) must be completed in lieu of this item. If byproduct material is in the form of a sealed source, include the make and model number of the storage container and/or device in which the source will be stored and/or used.)

For use in a Troxler Model 3411 COMPAC surface moisture-density gauge.

COPIES SENT TO OFF. OF
INSPECTION AND ENFORCEMENT

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REG5 LIC30
46-18301-01 PDR

FILE EXEMPT

96674

170.11(a)(5)

TRAINING AND EXPERIENCE OF EACH INDIVIDUAL NAMED IN ITEM 4 (Use supplemental sheets if necessary)

8. TYPE OF TRAINING	WHERE TRAINED	DURATION OF TRAINING	ON THE JOB (Circle answer)	FORMAL COURSE (Circle answer)
a. Principles and practices of radiation protection	Two-day Radiological training course presented by Daniel R. Howe, West Coast Branch Manager of Troxler Electronic Laboratories ¹ Inc., on August 16-17, 1978 at Portland, OR for all persons listed in items 4 and 5.		Yes No	(Yes) No
b. Radioactivity measurement standardization and monitoring techniques and instruments			Yes No	(Yes) No
c. Mathematics and calculations basic to the use and measurement of radioactivity			Yes No	(Yes) No
d. Biological effects of radiation			Yes No	(Yes) No

9. EXPERIENCE WITH RADIATION (Actual use of radioisotopes or equivalent experience)

ISOTOPE	MAXIMUM AMOUNT	WHERE EXPERIENCE WAS GAINED	DURATION OF EXPERIENCE	TYPE OF USE
Cs 137	8mCi	Nuclear gauge training course	two hours	Practical field experience performing compaction tests and moisture content tests.
Am 241	40mCi	Nuclear gauge training course	two hours	

10. RADIATION DETECTION INSTRUMENTS (Use supplemental sheets if necessary)

TYPE OF INSTRUMENTS (Include make and model number of each)	NUMBER AVAILABLE	RADIATION DETECTED	SENSITIVITY RANGE (mr/hr)	WINDOW THICKNESS (mg/cm ²)	USE (Monitoring, surveying, measuring)
None					

11. METHOD, FREQUENCY, AND STANDARDS USED IN CALIBRATING INSTRUMENTS LISTED ABOVE

Not applicable

12. FILM BADGES, DOSIMETERS, AND BIO ASSAY PROCEDURES USED (For film badges, specify method of calibrating and processing, or name of supplier)

Quarterly film badge service obtained from Radiation Detection Company,
162 Wolfe Road, Sunnyvale, California 94088

INFORMATION TO BE SUBMITTED ON ADDITIONAL SHEETS IN DUPLICATE

13. FACILITIES AND EQUIPMENT Describe laboratory facilities and remote handling equipment, storage containers, shielding, fume hoods, etc. Explanatory sketch of facility is attached. (Circle answer) ☒ No See attached sketch of Primary Storage

14. RADIATION PROTECTION PROGRAM Describe the radiation protection program including control measures. If application covers sealed sources, submit leak testing procedures where applicable, name, training, and experience of person to perform leak tests, and arrangements for performing initial radiation survey, servicing, maintenance and repair of the source.

See attachment

15. WASTE DISPOSAL If a commercial waste disposal service is employed, specify name of company. Otherwise, submit detailed description of methods which will be used for disposing of radioactive wastes and estimates of the type and amount of activity involved.

Not applicable

CERTIFICATE (This item must be completed by applicant)

16. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE APPLICANT NAMED IN ITEM 1, 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.

License Fee Category \$ None Req'd. per 170.11(a)9Fee Enclosed \$ NoneDate 20 SEPT 78

Applicant named in item 1

By:

Title of certifying official

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.

INDIAN HEALTH SERVICE
1212 S. JUDKINS
SEATTLE, WASHINGTON 98144

RADIATION SAFETY PROGRAM

A. SAFETY PROCEDURES

1. Do not operate or attempt to operate a gauge unless you have been authorized to do so.
2. Do not attempt to repair, modify or open the sealed source under any circumstances.
3. Wear a film badge at all times while operating or transporting a gauge.
4. Follow established operating procedures when using the gauge.
5. Keep unauthorized persons away from the gauge.
6. Keep the gauge in the "SAFE" or storage position when not in use.
7. Be sure that the gauge is locked within an authorized enclosure (e.g. closet, cabinet, vehicle, etc.) when it is not in use. Security against the theft of a radioisotope is of utmost importance and must not be neglected. The storage enclosure should be plainly labeled with a radiation warning sign of the approved type. Radiation levels at the outside surface of the storage enclosure must not be more than 2 MREM/HR.
8. Gauge(s) may only be transported by authorized personnel in approved vehicles. The gauge(s) may not be transported on the front or rear seats of any vehicle. If a pickup truck is used the gauge(s) must be locked in an enclosure (e.g. cabinets, shipping case etc.) and the enclosure tied securely (e.g. chained, bolted, etc.) to the bed of the truck in order to prevent loss or theft. Radiation levels at the driver and passenger seats and at the outside surface of the vehicle must not be more than 2 MREM/HR.
9. Insure that the gauge is leak tested at proper intervals.
10. When in doubt, ASK.

B. ACCIDENTS AND INCIDENTS

1. In case a gauge is lost or stolen, or involved in an accident which might cause physical damage to the source, the operator must IMMEDIATELY notify his Radiation Protection Officer. (RPO).
2. The Radiation Protection Officer will immediately notify the following authority who will provide instructions and assistance in accordance with the circumstances of the incident:

Region V, USNRC
Office of Inspection and
Enforcement
1919 N. California Blvd.
Suite 202
Walnut Creek, CA 94596

(415) 486-3141 Daytime
(415) 486-3141 Nights & Holidays
(FTS) 8-499-3141

3. In the event of the possibility of damage to the source or source control mechanism the operator will keep unauthorized persons at least ten feet from the gauge and prevent removal of the gauge from off the site until authorization by the (RPO) or appropriate authority.
4. If the gauge is lost or stolen immediately notify the local police or other law enforcement agency within whose jurisdiction the incident occurred.

TROXLER ELECTRONIC LABORATORIES, INC.

96674

HEREBY CERTIFIES THAT

Randy Willard

of

U. S. P. H. S. - Indian Health Service

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. |

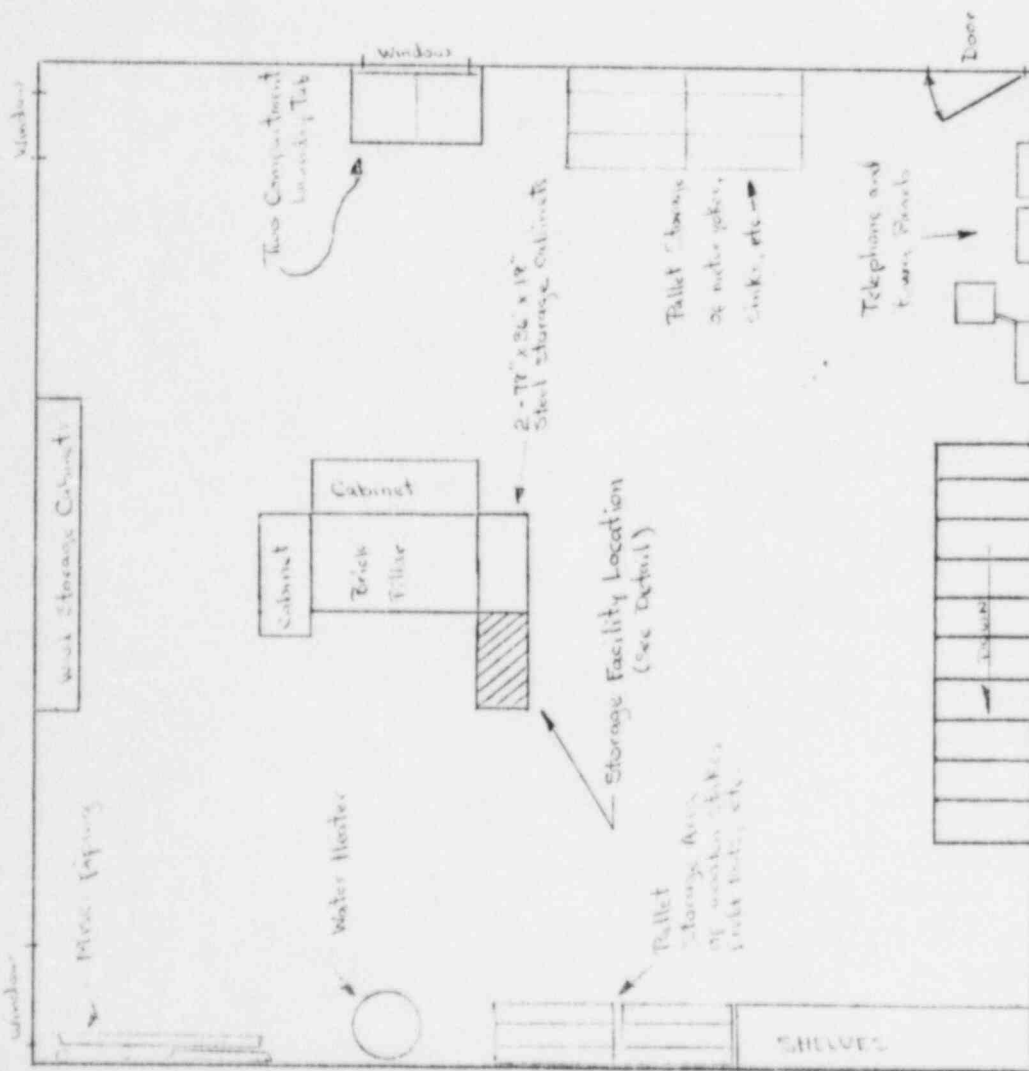
Gauge Operation

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

Daniel R. Howe
INSTRUCTOR

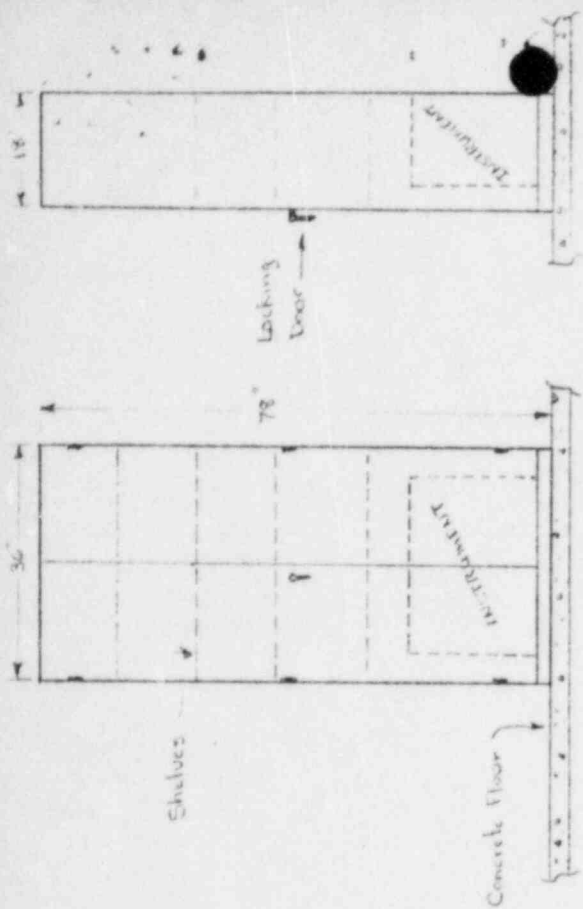
August 16 & 17, 1978
DATE

William F. Troxler
PRESIDENT

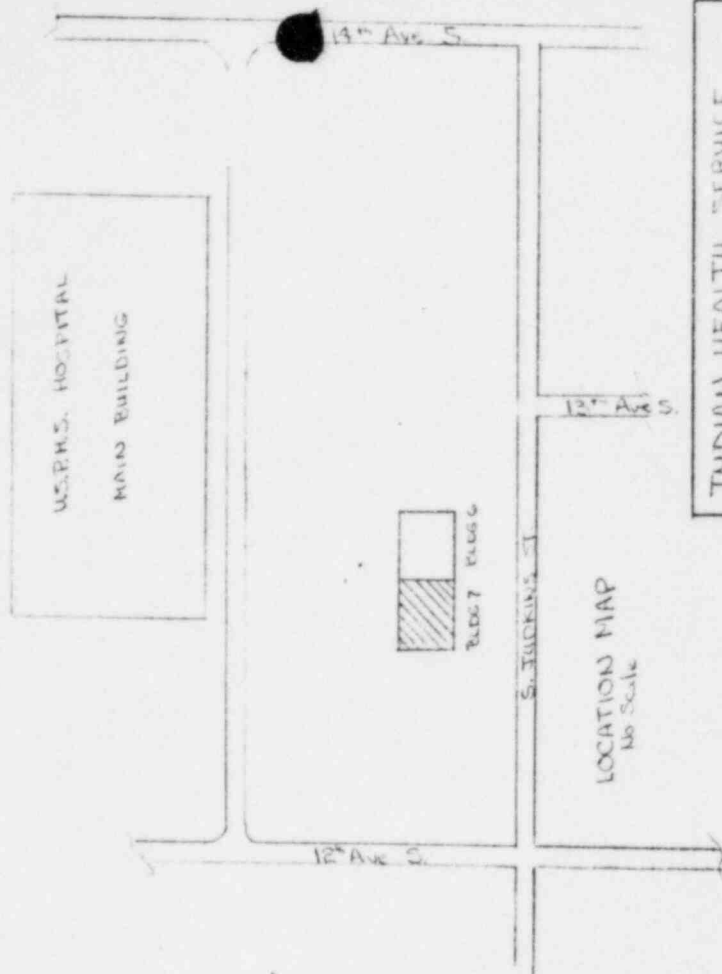


BASEMENT FLOOR PLAN
BUILDING 7 - U.S.P.H.S. HOSPITAL

Scale: 1" = 6'



DETAIL OF METAL STORAGE CABINET
1" = 30"



INDIAN HEALTH SERVICE
SKETCH OF STORAGE FACILITY

95674

UNITED STATES ATOMIC ENERGY COMMISSION
APPLICATION FOR BYPRODUCT MATERIAL LICENSE

Form approved
Budget Bureau No. 38-20022

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Indian Health Service Puget Sound Service Unit 1212 So. Judkins Seattle, Washington 98144	At various temporary job sites within the jurisdiction of the U.S.N.R.C.

2. DEPARTMENT TO USE BYPRODUCT MATERIAL	3. PREVIOUS LICENSE NUMBER(S). (If this is an application for renewal of a license, please indicate and give number.)
Sanitation Facilities Construction Branch	None

4. INDIVIDUAL USER(S). (Name and title of individual(s) who will use or directly supervise use of byproduct material. Give training and experience in Items 8 and 9.)	5. RADIATION PROTECTION OFFICER. (Name of person designated as radiation protection officer if other than individual user. Attach resume of his training and experience as in Items 8 and 9.)
Randy Willard/Sr. Field Engineer	Same as 4

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Page Two

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License Fee Category None Req'd. per 170.11(a)9

Fee Enclosed None

Date 20 SEPT 78

Bandy Willard
Applicant named in item 1

By: Teri Hunsman
District Engineer

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.

INDIAN HEALTH SERVICE
1212 S. JUDKINS
SEATTLE, WASHINGTON 98144

RADIATION SAFETY PROGRAM

A. SAFETY PROCEDURES

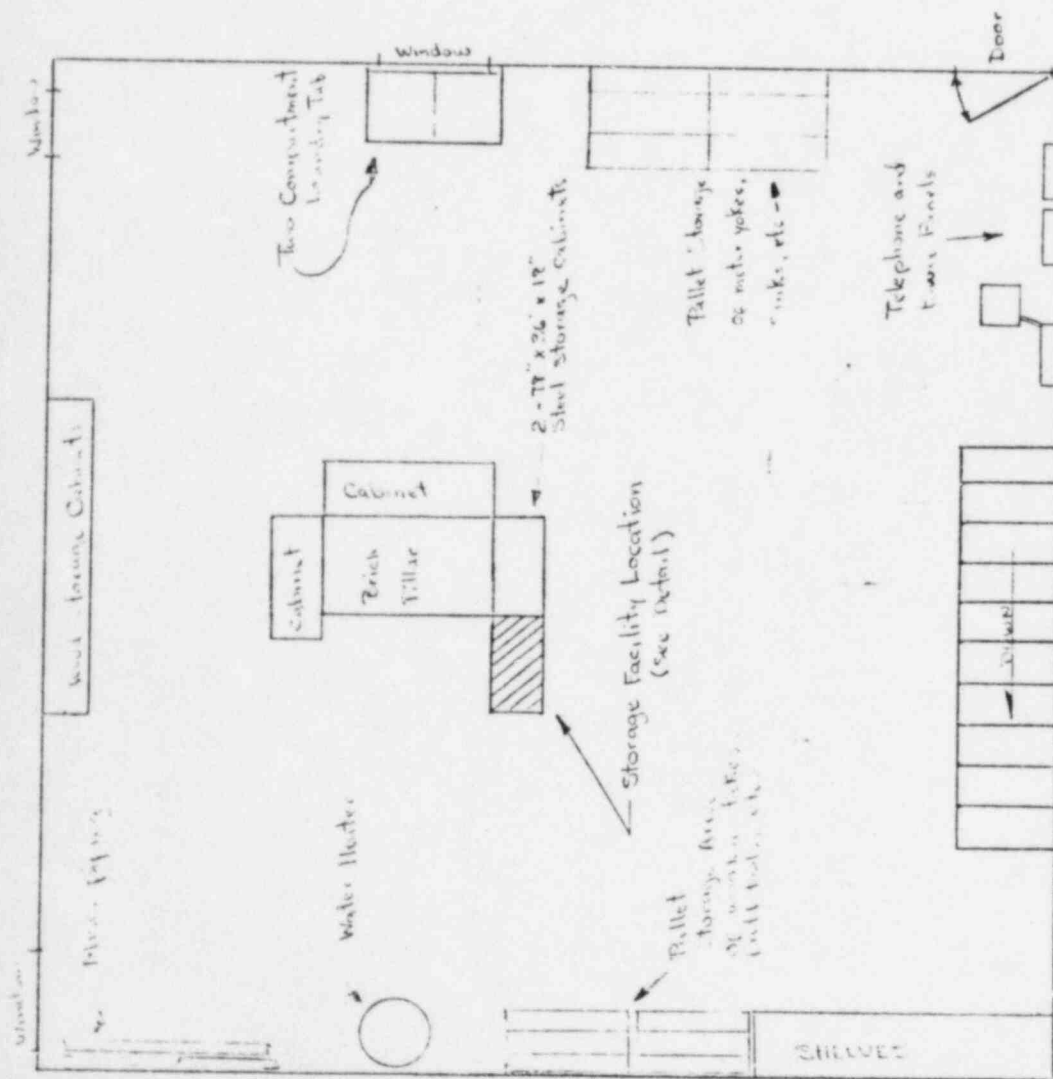
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1919 N. California Blvd.	
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Walnut Creek, CA 94596	

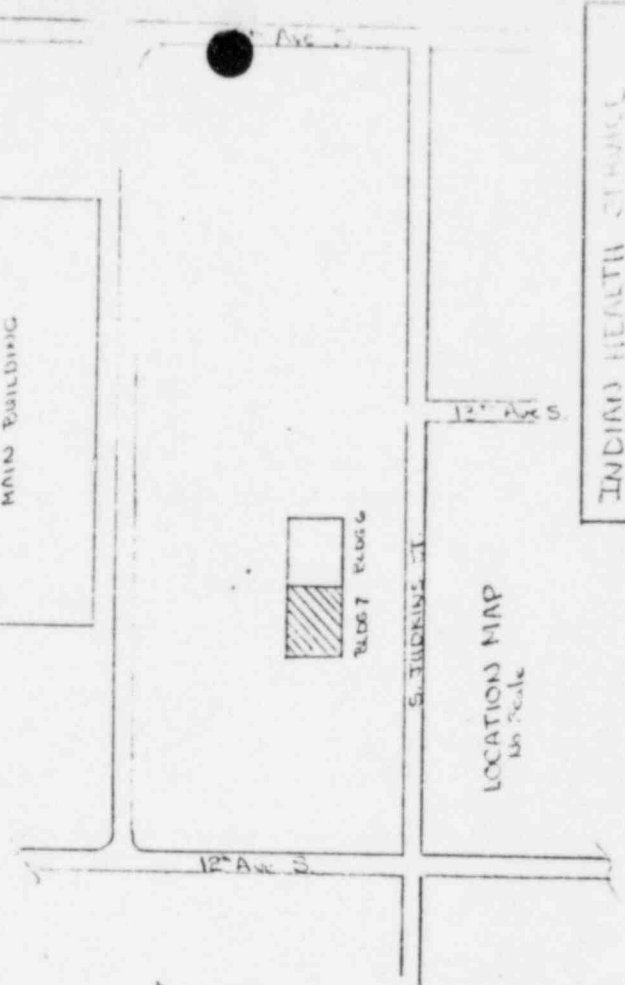
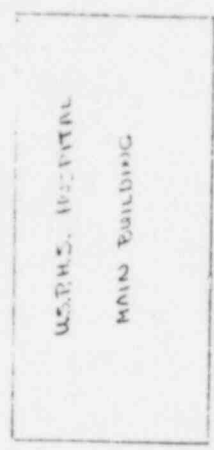
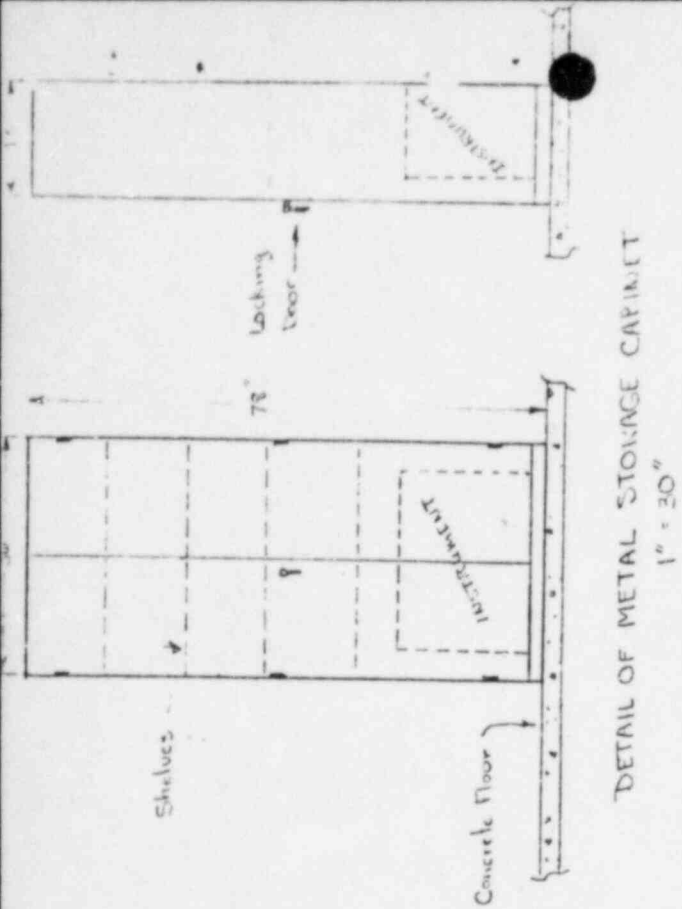
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Basement Floor Plan
 BUILDING 7 - U.S.P.H.S. HOSPITAL

Scale: 1" = 6'

9667 1



LOCATION MAP
 1/8" Scale

INDIAN HEALTH SERVICE
 SKETCH OF STORAGE FACILITY

TROXLER ELECTRONIC LABORATORIES, INC.

HEREBY CERTIFIES THAT

Randy Willard

of

U. S. P. H. S. - Indian Health Service

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Gauge Operation

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

Daniel R. Howe
INSTRUCTOR

August 16 & 17, 1978
DATE

William F. Troxler
PRESIDENT

95674