

2.50 Series

Emergency Plan

(FSAR Section 12.5)

NUMBER	TITLE	CURRENT REVISION							
		#	DATE	#	DATE	#	DATE	#	DATE
2.50.0	Declaration & Categorization of Emer. Cond.	1	3/81	2	9/81	3	6/82		
2.50.1	Notification of Unusual Event	1	3/81	2	9/81	3	10/82		
2.50.2	Alert	1	3/81	2	9/81	3	7/82		
2.50.3	Site Area Emergency	1	3/81	2	9/81	3	11/82		
2.50.4	General Emergency	1	3/81	2	9/81	3	11/82		
2.50.5	Emergency Plan Training and Exercise	0	3/81						
2.50.6	Emergency Equipment Readiness Check	16	10/82						
2.50.7	Emergency On-Site Radiation Monitoring Procedure	0	3/81	1	9/81	2	11/82		
2.50.8	Medical Emergency Plan	0	3/81						
2.50.9	Security Force Radiation Emergency Plan	0	3/81	1	9/81				
2.50.10	Evaluation of Radiological Data	1	3/81	2	9/81				
2.50.11	Plant Entry and Recovery Plan	4	6/80	4	7/82	5	10/82		
2.50.12	Emergency Off-Site Radiation Monitoring Proc.	0	3/81	1	10/82				
2.50.14	Emergency Radiation Exposure Control	0	3/81	1	9/81	2	10/82		
2.50.15	Release of Public Information	0	3/81						
2.50.16	Off-Site Protective Action Recommendations	0	3/81						
2.50.17	Emergency Notification	4	7/82						

Dept. Head <u> </u>	Proc. No. <u>2.50.7</u>
Plt. Mgr. <u> </u>	Class. <u>A</u>
PORC <u> </u>	Rev. No. <u>2</u>
Mgr. of Ops. <u>NA</u>	Issue Date <u>11-17-82</u>
	Review Date <u>11-17-84</u>

2.50.7 EMERGENCY ON-SITE RADIATION MONITORING PROCEDURE

1.0 DISCUSSION

Radiological surveys must be performed in order to verify instrumentation readouts provided in the Control Room and also to provide information about radiological conditions in areas not covered by the fixed in-plant monitors. Additional surveys to determine habitability of emergency response centers must be performed as well as surveys of personnel and equipment for exposure to radiation or contamination. These surveys should be performed as soon as possible after the declaration of an emergency that has possible in plant radiological consequences.

2.0 OBJECTIVE

- R To establish a procedure for on-site radiation monitoring that is to be performed by shift H.P. Technicians during emergency conditions.

3.0 REFERENCES

- 3.1 HP Procedure 9.1.1.
- 3.2 Emergency Plan Procedure 2.50.14, "Emergency Radiation Exposure Control."
- R 3.3 Emergency Plan Procedure 2.50.12, "Emergency Off-site Radiation Monitoring."
- R 3.4 H.P. Procedure 9.1.6, "Establishing and Posting Controlled Areas."

4.0 PRECAUTIONS

- R 4.1 Maintain radiation exposure within the limits specified by 2.50.14.
- R 4.2 If survey instruments fail or saturate, retreat to a safe location immediately.
- 4.3 Use proper respiratory protection in areas of known or suspected high airborne radioactivity.

5.0 PREREQUISITES

- 5.1 Check all survey equipment for battery response and source response prior to use.
- 5.2 If air samples at the security fence or other outside areas are to be taken, obtain a Company vehicle to provide battery power for the air sampler.

6.0 EQUIPMENT

- 6.1 High range survey meter.
- 6.2 Battery operated or A.C. powered air sampler with particulate filter and charcoal or silica gel cartridge.
- 6.3 Count rate instrument with G.M. detector or standard swipes and counter for contamination measurements.
- 6.4 High range dosimeter.
- 6.5 In-plant Survey forms.

NOTE: In-plant survey forms are located on the H.P. check point, the O.S.C. Emergency Cabinet (for O.S.C. and Control Room use).

7.0 PROCEDURE

7.1 Unusual Event Emergency

- R 1. Perform radiation, contamination and airborne radioactivity surveys in accordance with H.P. Procedure 9.1.1 in the affected area as requested by the Emergency Coordinator and/or the Radiological Evaluation Assistant.
- R 2. Perform special surveys as requested by the Emergency Coordinator and/or the Radiological Evaluation Assistant.
- R 3. Perform surveys of affected personnel for radiation and contamination as dictated by the circumstances of the event. Report any high exposure (in excess of plant administrative limits or 10 CFR 20 limits) to an H.P. Supervisor. Report any personnel contamination requiring followup (unsuccessful decontamination or positive nasal smear) to an H.P. Supervisor or the Emergency Coordinator.
- R 4. Report survey results to the H.P. Supervisor or the Emergency Coordinator.
- 5. Following completion of the surveys, appropriately post and establish boundaries and controls per Procedure 9.1.6.
- 6. Accompany any contaminated injured employee to the Hospital and provide necessary radiological controls.

7.2 Alert Emergency

- R 1. Perform radiation, contamination and airborne radioactivity surveys, in accordance with HP Procedure No. 9.1.1, in the affected area as requested by the Emergency Coordinator and/or the Radiological Evaluation Assistant.

2. Perform special surveys requested by the Emergency Coordinator and/or the Radiological Evaluation Assistant.
3. Perform surveys necessary to determine the habitability of the Control Room, the Technical Support Center (TSC) and the Emergency Operations Facility (EOF). Limits are specified in the Emergency Radiation Exposure Control Procedure 2.50.14, Table 1. Rezero the center pocket dosimeter. Note the time and secure the dosimeter in an appropriate location.
- R 4. Perform surveys of affected personnel for radiation and contamination as dictated by the circumstances of the incident. Report any high exposure (in excess of plant administrative limits or 10 CFR 20 limits) to the Radiological Evaluation Assistant. Report any personnel contamination requiring followup (unsuccessful decontamination or positive nasal smear) to the Radiological Evaluation Assistant.
5. When time or additional personnel are available, proceed to the EOF and survey evacuated personnel for contamination and radiation exposure. Use the guidelines in Step 3 for reporting individuals requiring followup.
- R 6. Report all survey results to the Radiological Evaluation Assistant.
7. If time and dose rates permit establish boundaries and post areas in accordance with Procedure 9.1.6.
8. Accompany any contaminated injured employee to the Hospital and provide necessary radiological controls.

7.3 Site Area Emergency

1. Transport as many survey instruments as possible to the Operations Support Center (OSC).
2. Perform the surveys necessary to determine the habitability of the OSC, Control Room, TSC and the EOF. Limits are specified in the Emergency Radiation Exposure Control Procedure 2.50.14, Table 1. Rezero the center pocket dosimeter. Note the time and secure the dosimeter in an appropriate location.
- R 3. Perform radiation, contamination and airborne radioactivity surveys, in accordance with HP Procedure 9.1.1, in the affected areas as requested by the Emergency Coordinator and/or the Radiological Evaluation Assistant.
- R 4. Perform special surveys as requested by the Emergency Coordinator or the Radiological Evaluation Assistant.

5. When time or additional personnel are available, proceed to the EOF and survey evacuated personnel for contamination and radiation exposure. Report any high exposure (greater than 3 rem) or personal contamination or positive nasal smear to an HP Supervisor so evaluation and/or decontamination and followup can be performed.

- R
6. Report all survey results to the Radiological Evaluation Assistant.
7. When personnel are available, establish a Site Access Control Point and survey all vehicles leaving the site. Report any contaminated vehicles to the EOF.
8. When time permits, update the site survey map with current survey information.
9. Accompany any contaminated injured employee to the Hospital and provide necessary radiological controls.

7.4 General Emergency

1. Transport as many survey instruments as possible to the OSC.
2. Perform the surveys necessary to determine the habitability of the OSC, Control Room, TSC and the EOF. Limits are specified in the Emergency Radiation Exposure Control Procedure, 2.50.14, Table I. Rezero the center pocket dosimeter. Note the time and secure the dosimeter in an appropriate location.
- R
3. Perform radiation, contamination and airborne radioactivity surveys, in accordance with HP Procedure 9.1.1, in the affected area as requested by the Emergency Coordinator and/or the Radiological Evaluation Assistant.
- R
4. Perform other surveys as requested by the Emergency Coordinator or the Radiological Evaluation Assistant.
5. When time or additional personnel are available, proceed to the EOF and survey evacuated personnel for contamination and radiation exposure. Report any high exposure (greater than 3 rem) or personal contamination or positive nasal smear to an HP Supervisor so evaluation and/or decontamination and followup can be performed.
6. When personnel are available, establish a Site Access Control Point and survey all vehicles leaving the site. Report any contaminated vehicles to the EOF.
7. When time permits, update the site survey map with current survey information.
8. Accompany any contaminated injured employee to the Hospital and provide necessary radiological controls.

8.0 FINAL CONDITIONS

- 8.1 Necessary on-site radiation surveys have been performed.
- R 8.2 A qualified radiological monitor, assigned by the Emergency Coordinator, will accompany contaminated injured employees to the hospital!

NOTE: If a number of employees are contaminated injured patients, then the initial radiological monitor assigned will standby at the hospital to assist in processing the incoming patients. Additional monitors will not be assigned for each patient.

INDEX OF SURVEY FORMS

<u>AREA</u>	<u>PAGE NO.</u>
Containment El. 2'	1
Containment El. 20'	2
Containment El. 46'	3
Personnel Hatch	4
Primary Auxiliary Bldg. 1st Floor	5
Primary Auxiliary Bldg. 2nd Floor	6
Primary Auxiliary Bldg. 3rd Floor	7
Primary Auxiliary Bldg. Vent Room	8
Area between Spray Bldg. & Cont. Equip Hatch	9
Service Building	10
Spray Bldg. El. 36' & El. 21'	11
Spray Bldg. El. 12', -4', -6' and -11'	12
Turbine Bldg. El. 61'	13
Turbine Bldg. El. 39'	14
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Site Plan	16
Fuel Bldg. 1st & 2nd Levels	17
Fuel Bldg. Upper Level	18
RCA Storage Area	19
Gate House	20
Office Building	21
Administration Bldg.	22
Control Room	23
Operational Support Center	24
Emergency Operations Facility	25

Reactor Power Level _____ %

Date _____

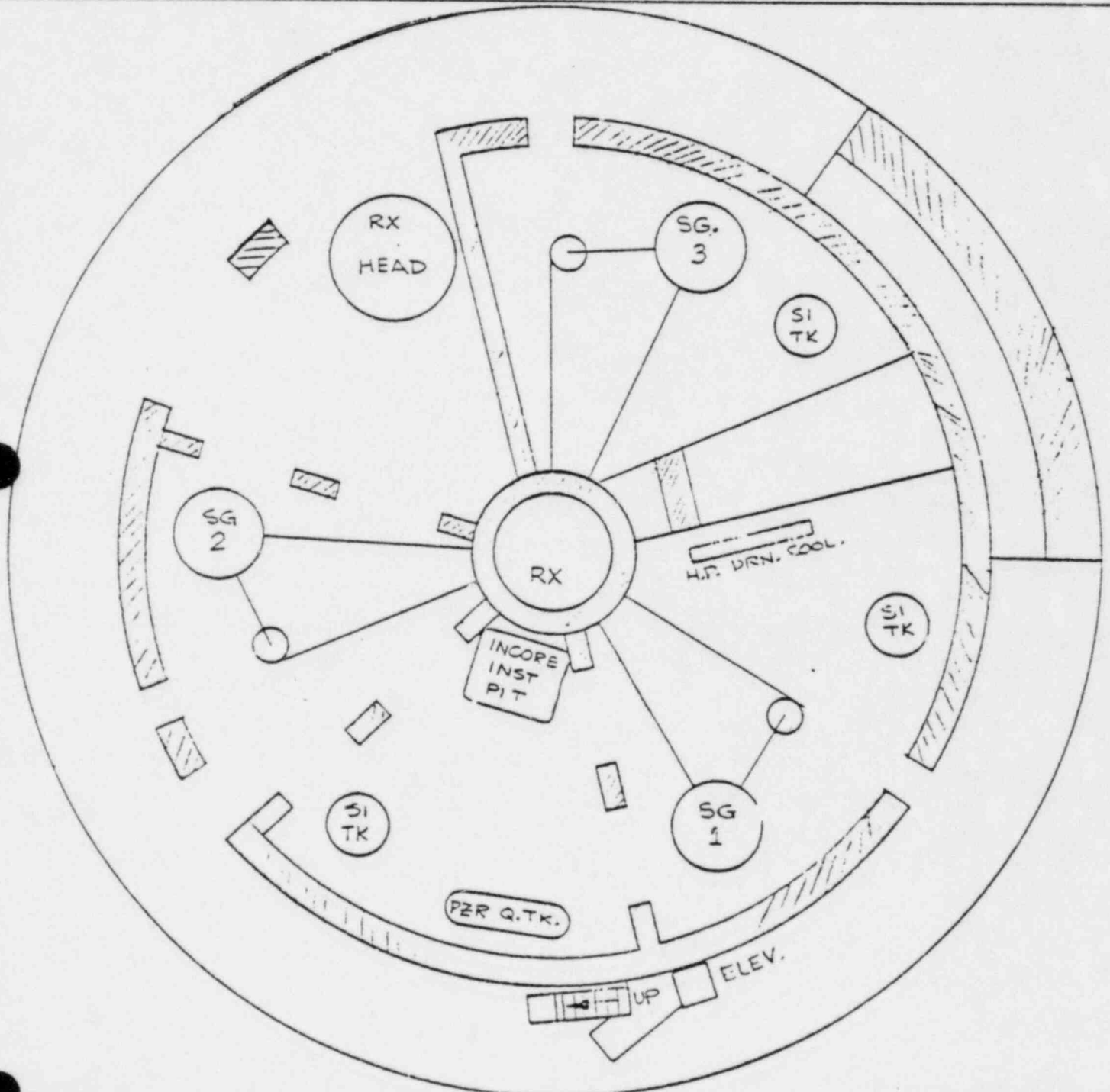
Counter _____ Eff. _____ Bkg. _____

Time _____

Survey Inst. _____ Survey Inst. No. _____

Tech _____

Survey Inst. _____ Survey Inst. No. _____



NOTE: (1) All dose rates are reported in MREM/HR at waist level unless otherwise specified.
(2) All contamination results are reported in DPM/100 cm².

Survey - CONTAINMENT - Elev. 20' (2nd level)

Reactor Power Level _____ %

Date _____

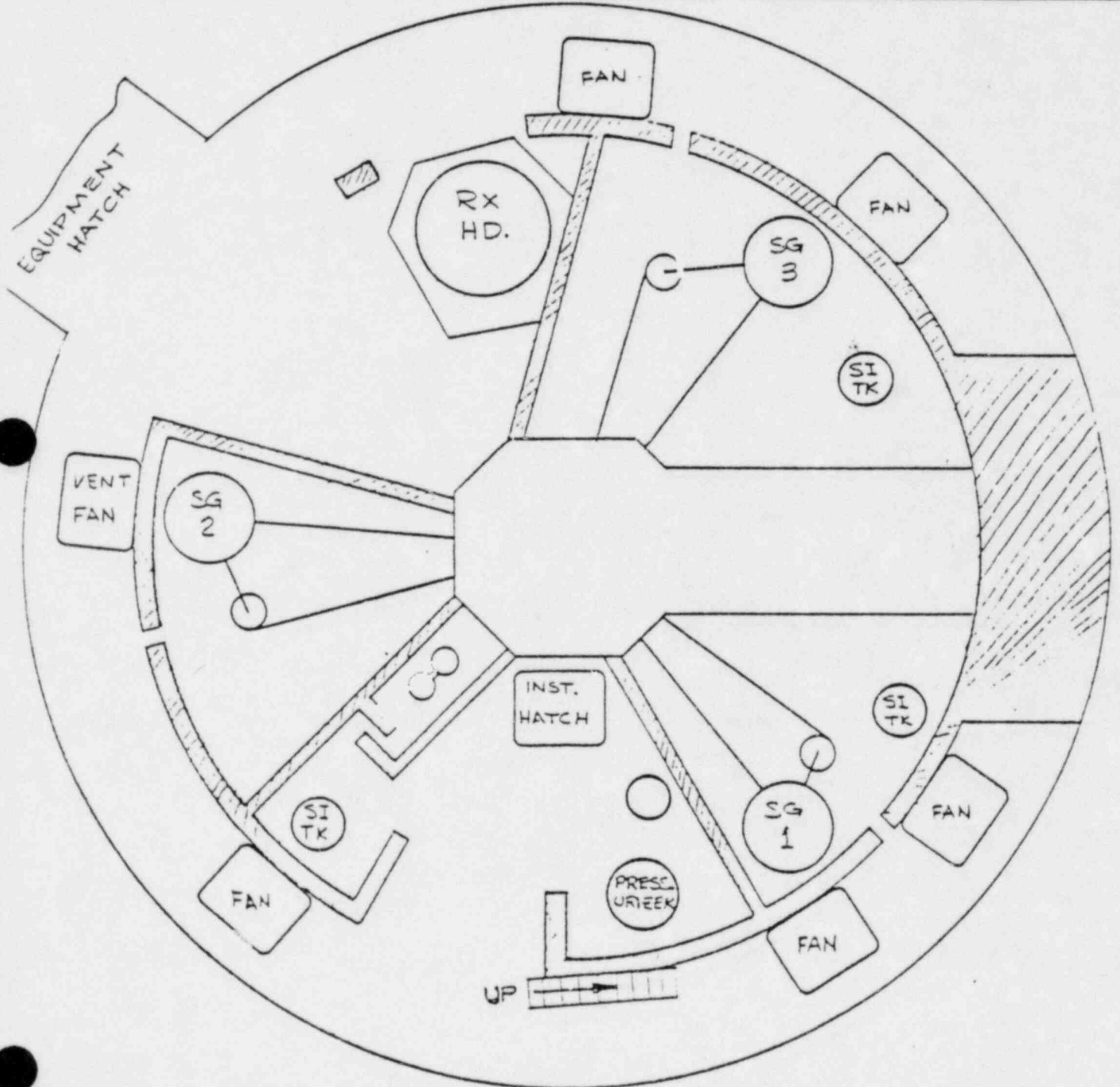
Counter _____ Eff. _____ Bkg. _____

Time _____

Survey Inst. _____ Survey Inst. No. _____

Tech _____

Survey Inst. _____ Survey Inst. No. _____



NOTE: (1) All dose rates are reported in MREM/HR at waist level unless otherwise specified.
(2) All contamination results are reported in DPM/100cm².

Survey - CONTAINMENT - Elev. 46' (Upper Level)

Reactor Power Level _____ %

Date _____

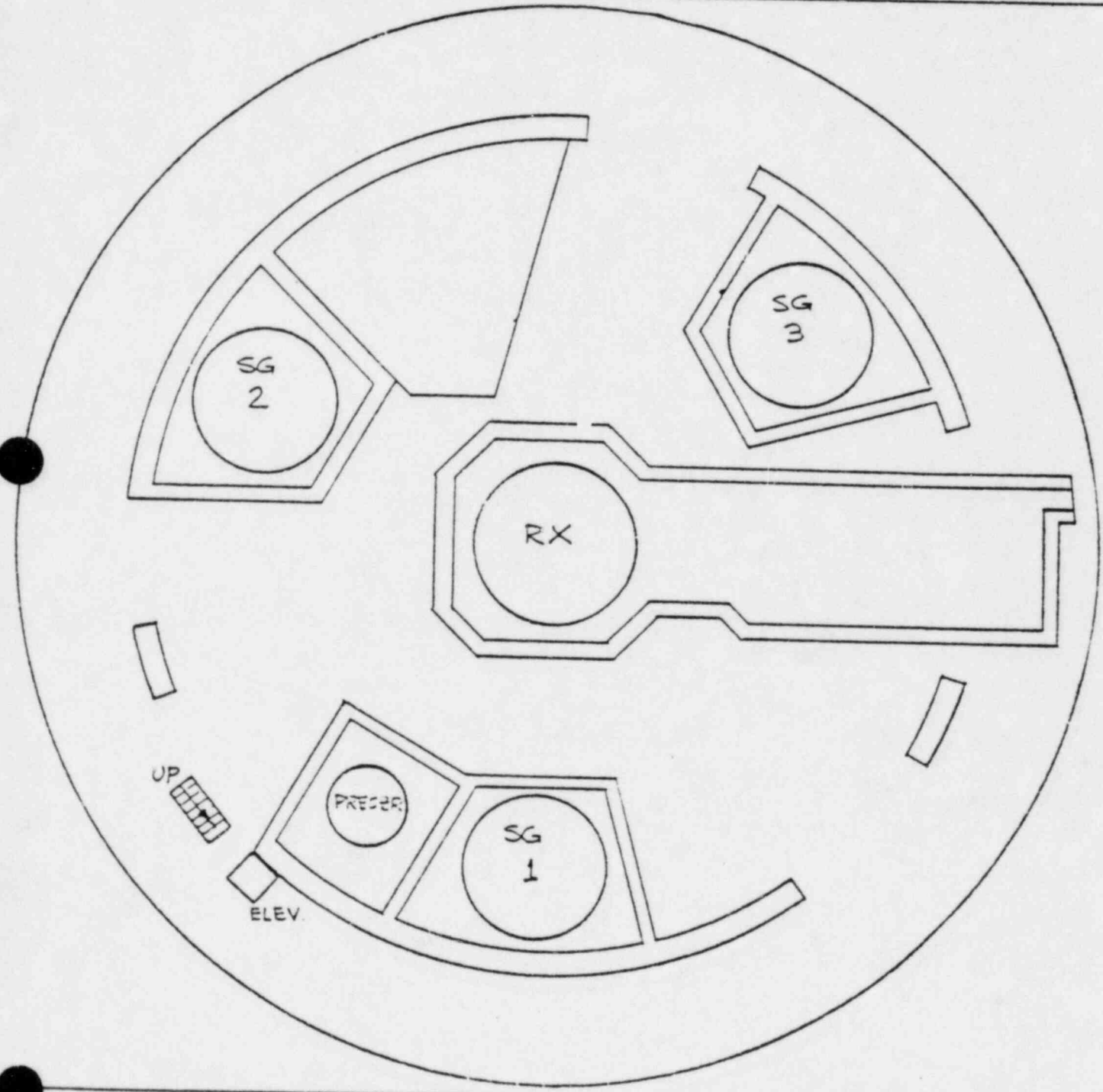
Counter _____ Eff. _____ Bkg. _____

Time _____

Survey Inst. _____ Survey Inst. No. _____

Tech _____

Survey Inst. _____ Survey Inst. No. _____



NOTE: (1) All dose rates are reported in MREM/HR at waist level unless otherwise specified.
 (2) All contamination results are reported in DPM/100cm².

MAINE YANKEE ATOMIC POWER COMPANY

PERSONNEL HATCH SURVEY FORM

DATE _____

TIME _____

H.P. TECH. _____

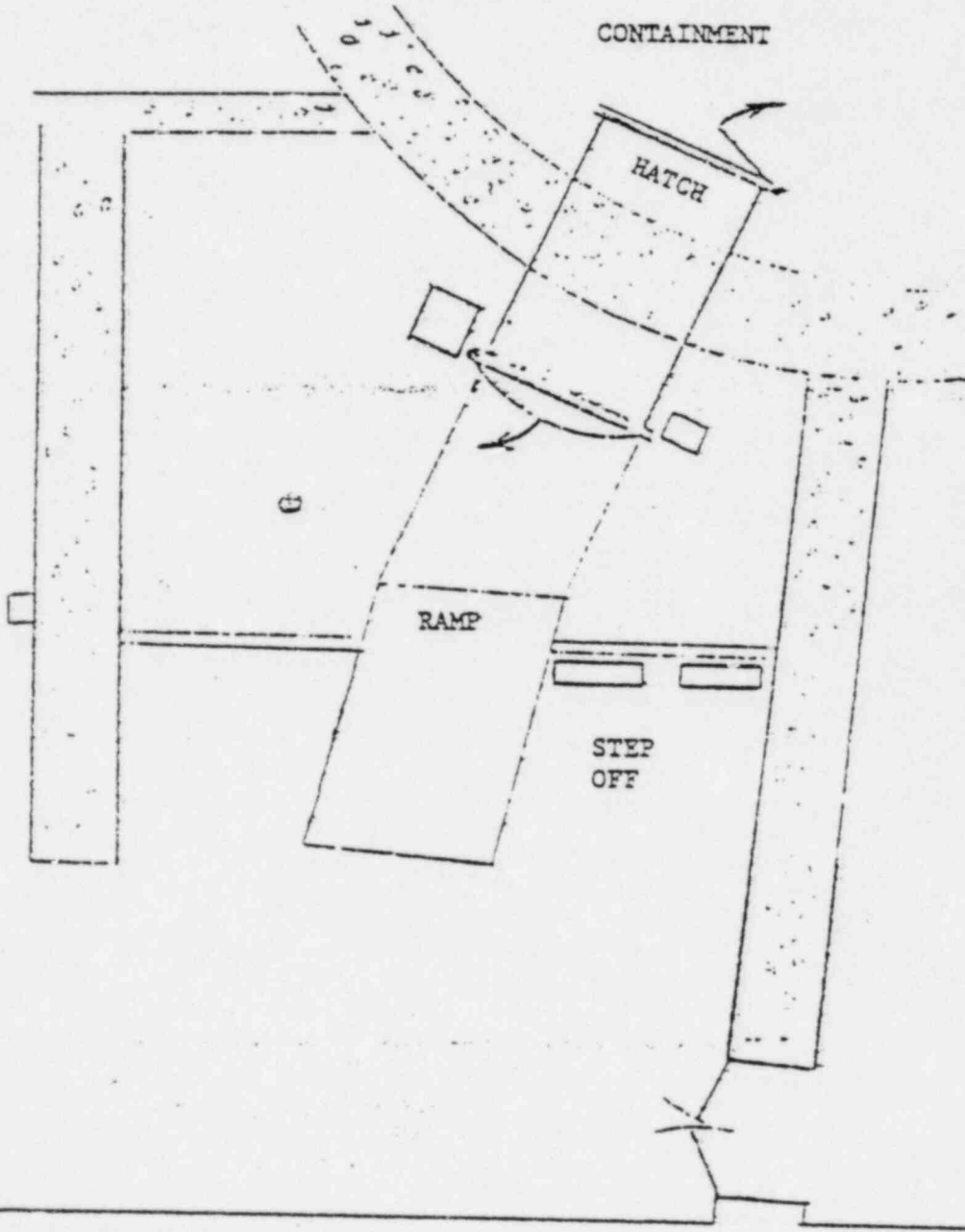
COUNTER _____

SURVEY INST. & NO. _____

Efficiency _____

Bkg. _____

NOTE: All readings to be in MR/HR or dpm/100cm²



No.
1
2
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18
19
20

EL-20'

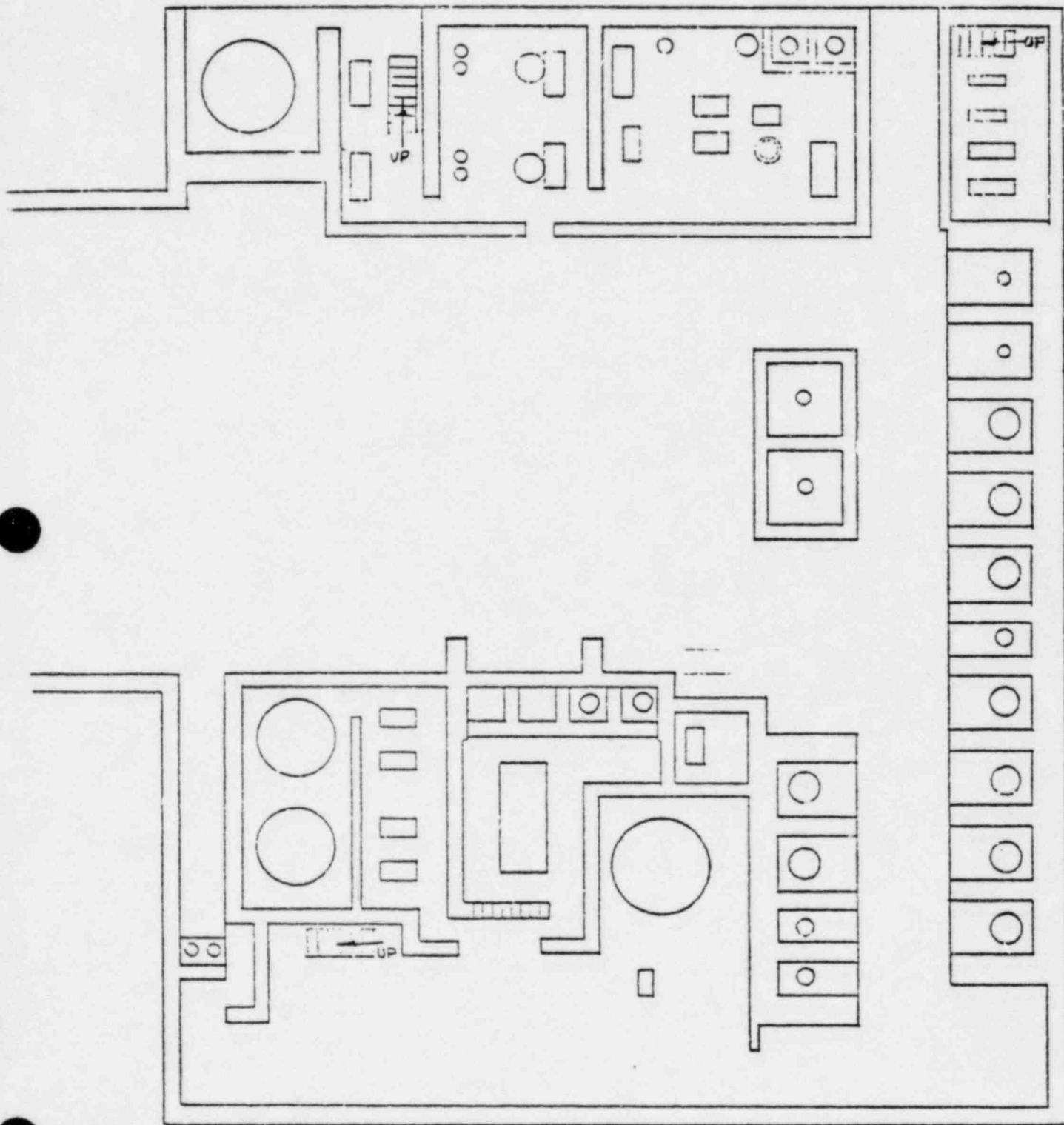
RADIATION SURVEY - PRIMARY AUXILIARY BLDG.-1st FLOOR

COUNTER _____
SURVEY INST. & NO. _____
EFFICIENCY _____
BKG _____

DATE _____

TIME _____

TECH _____



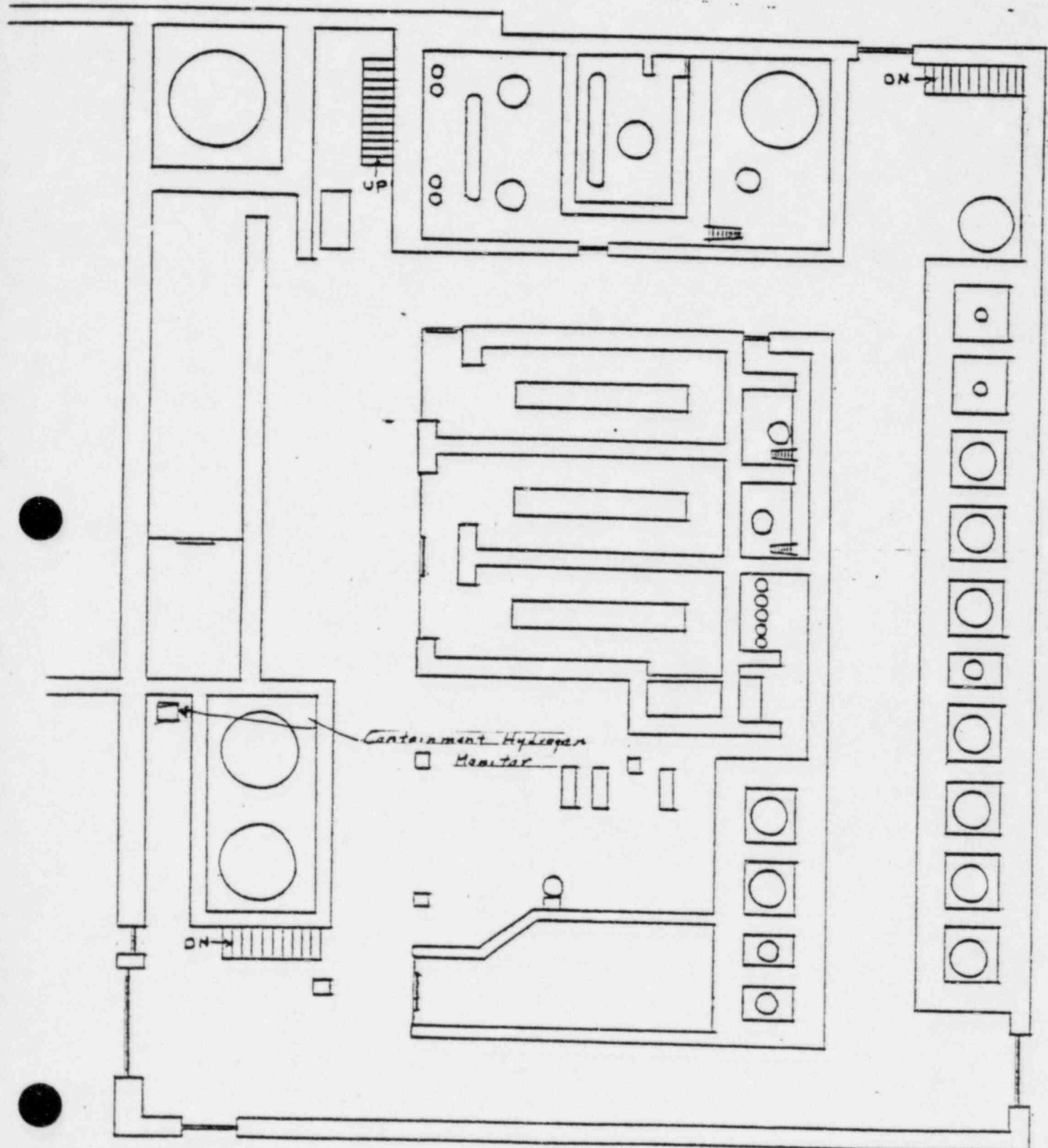
NOTE: (1) DOSE RATE READINGS INDICATE MREM/HR AT WAIST LEVEL UNLESS OTHERWISE SPECIFIED.

(2) CONTAMINATION SURVEY REPORTED IN DPM/100 CM² UNITS—INDICATE LOCATION & ACTIVITY WITH CIRCLED READING.

PRIM. AUX. BLDG 2ND FLOOR

COUNTER _____
 SURVEY INST. + NO. _____
 EFFICIENCY _____
 BKG _____

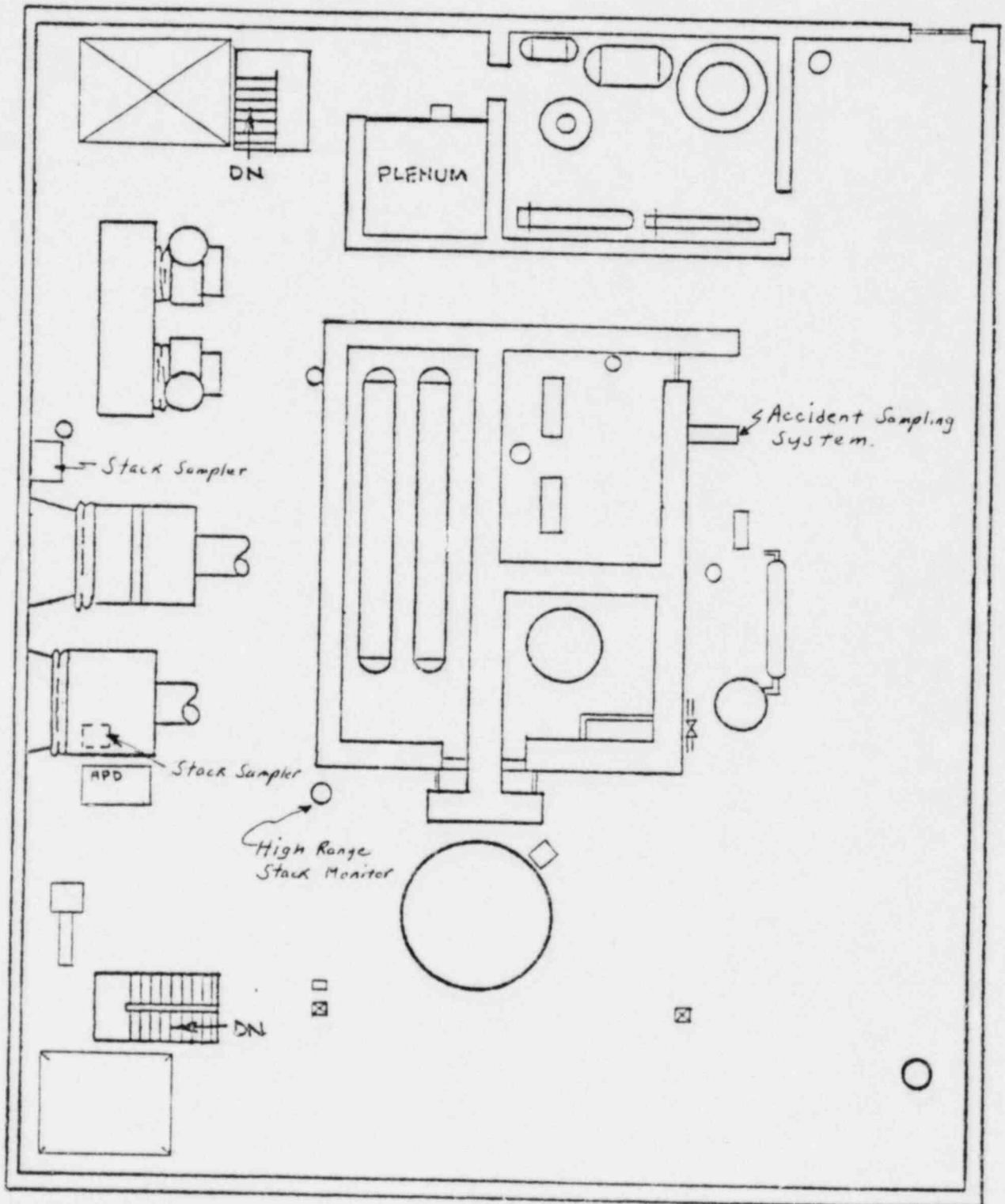
DATE _____
 TIME _____
 TECH _____



DOSE RATES IN mR/hr UNLESS OTHERWISE SPECIFIED
 CONTAMINATION LEVELS IN DPM/100cm²

COUNTER _____
SURVEY INST. & NO. _____
EFFICIENCY _____
BKG _____

DATE _____
TIME _____
TECH _____



NOTE (1) DOSE RATE READINGS INDICATE MREM/HR AT WAIST LEVEL UNLESS OTHERWISE SPECIFIED
(2) CONTAMINATION SURVEY REPORTED IN DPM/100 CM² UNITS - INDICATE LOCATION & ACTIVITY WITH CIRCLED READING.

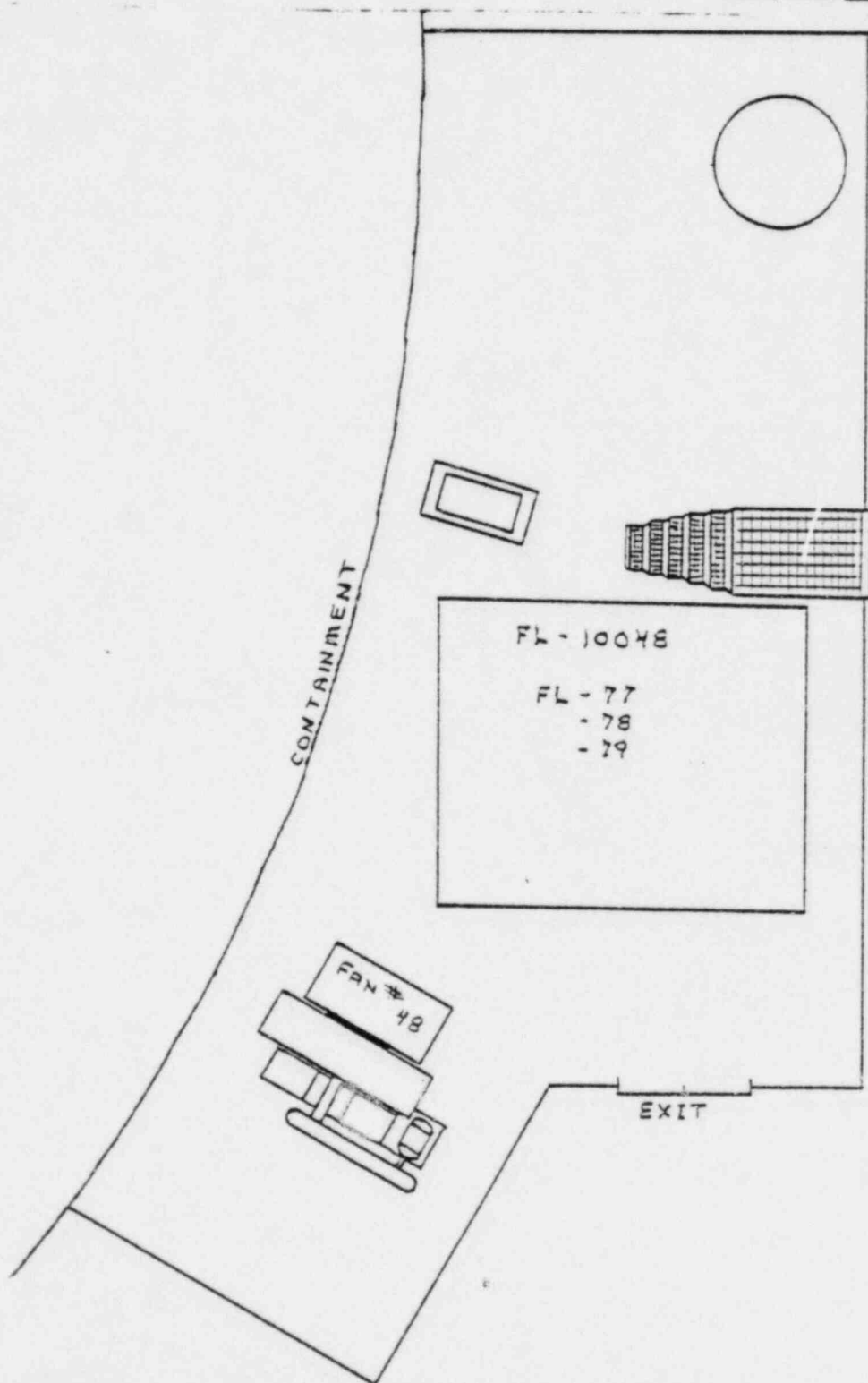
Counter _____ Inst. Type & No. _____ Date _____

E _____ Time _____

Bkg. _____ Tech. _____

NOTE: All Dose Rate readings in MR/HR.
All Contamination readings are circled in DPM/100cm².

Area/Item VENT. RM. 36' EL P.A.B.

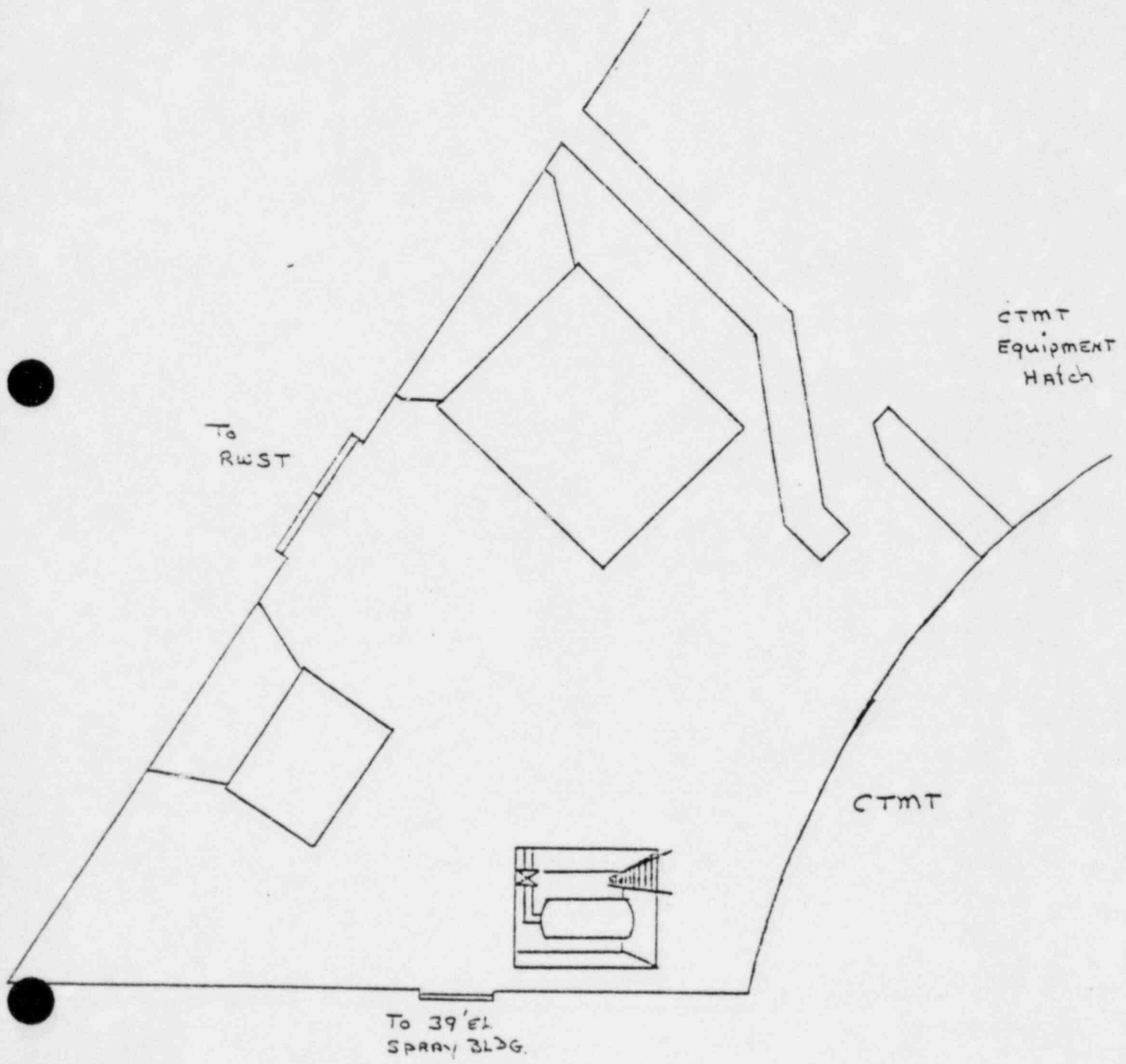


Blg. _____

Time _____

Tech. _____

NOTE: All Dose Rate readings in MR/HR.
All Contamination readings are circled in DPM/100cm².

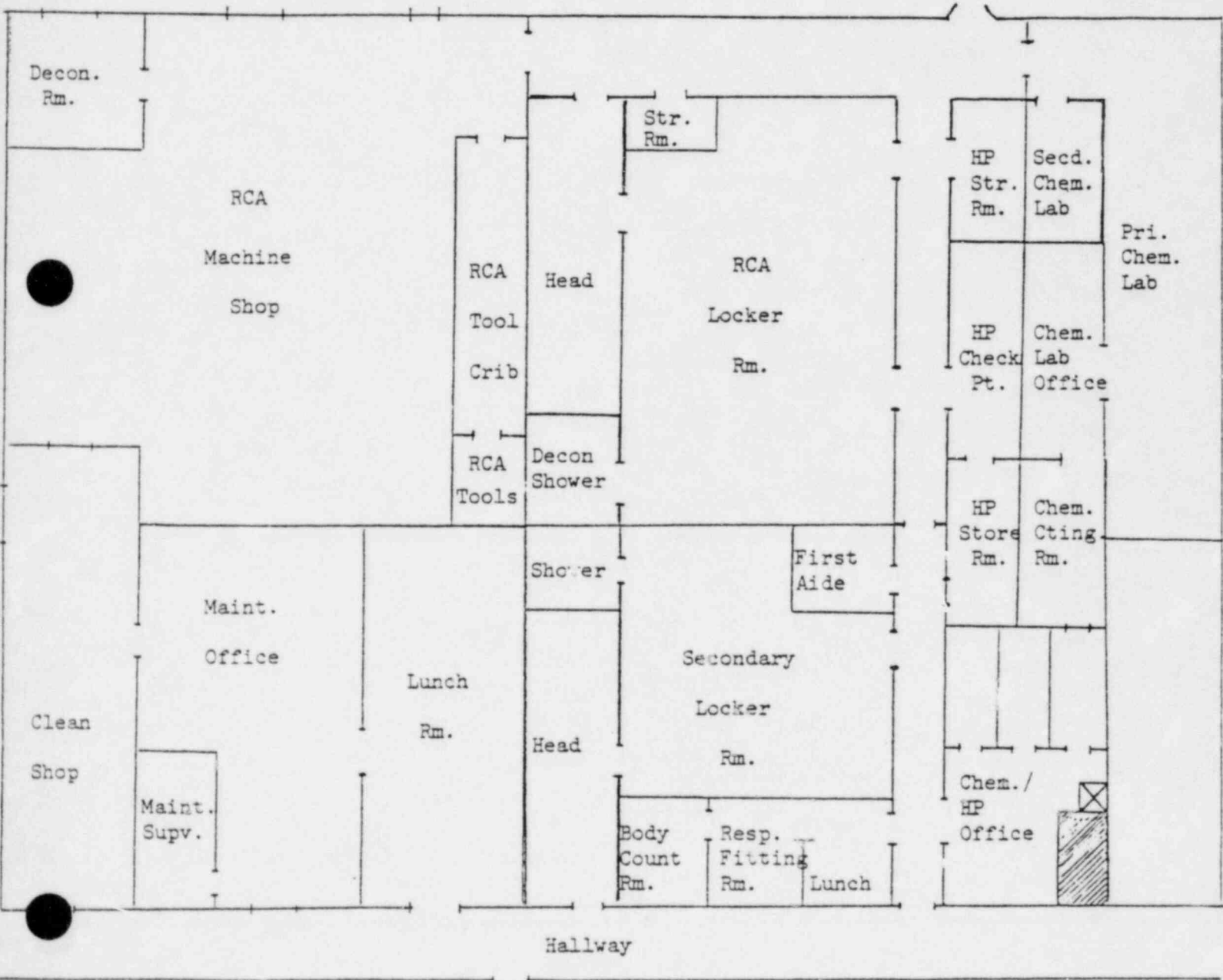


MY-HP-26-72 (Rev. 3)

MAINE YANKEE ATOMIC POWER COMPANY SERVICE BUILD. ROUTINE SURVEY

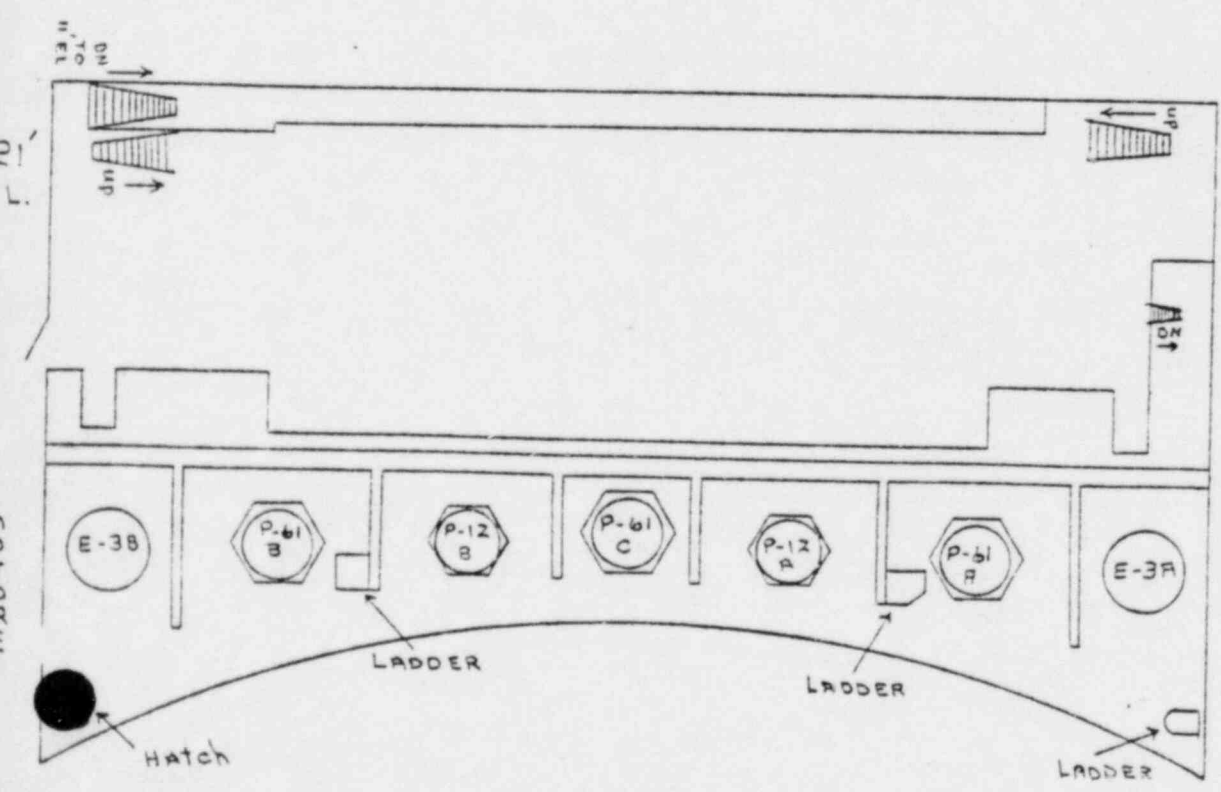
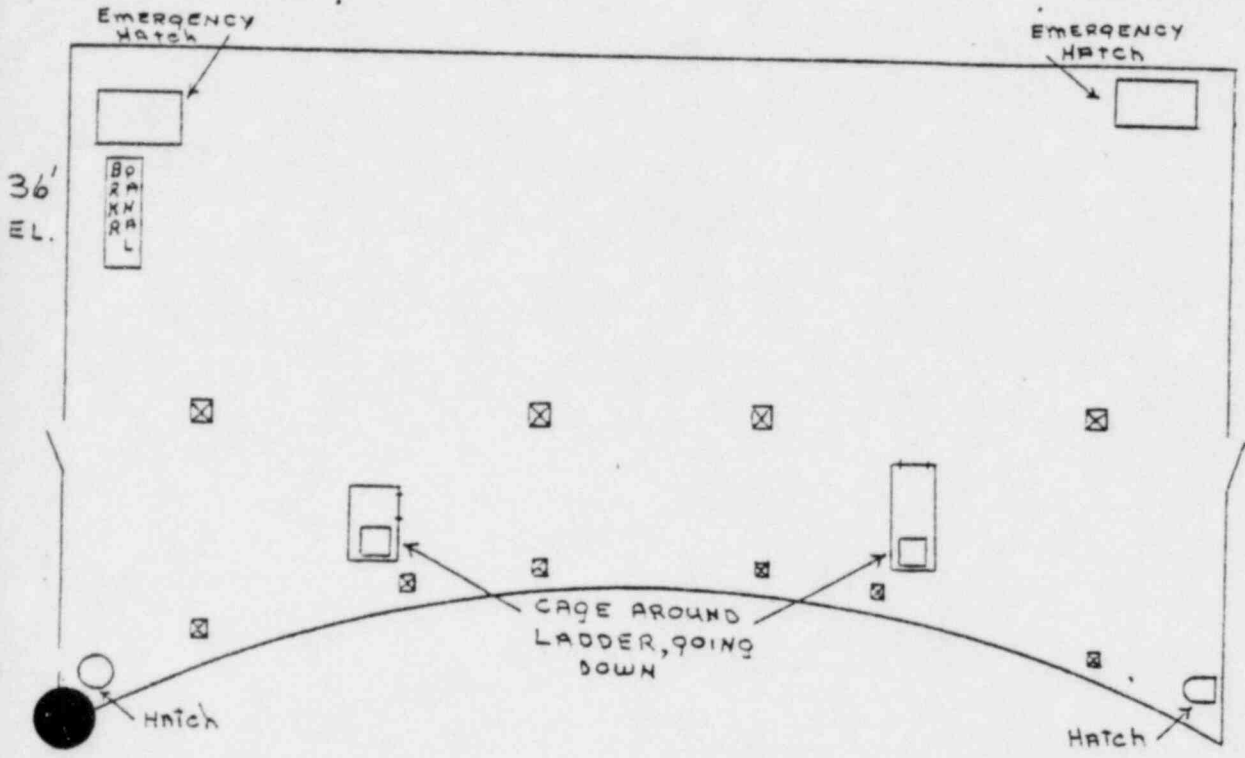
SCALER _____ INST. _____ DATE _____
 EFF. _____ TIME _____
 BKG. _____ TECH _____

NOTE: All dose rate readings are in MR/HR. All contamination readings are circled in DPM/100cm².



MAINE YANKEE ATOMIC POWER CO. SPRAY BUILDING ROUTINE SURVEY

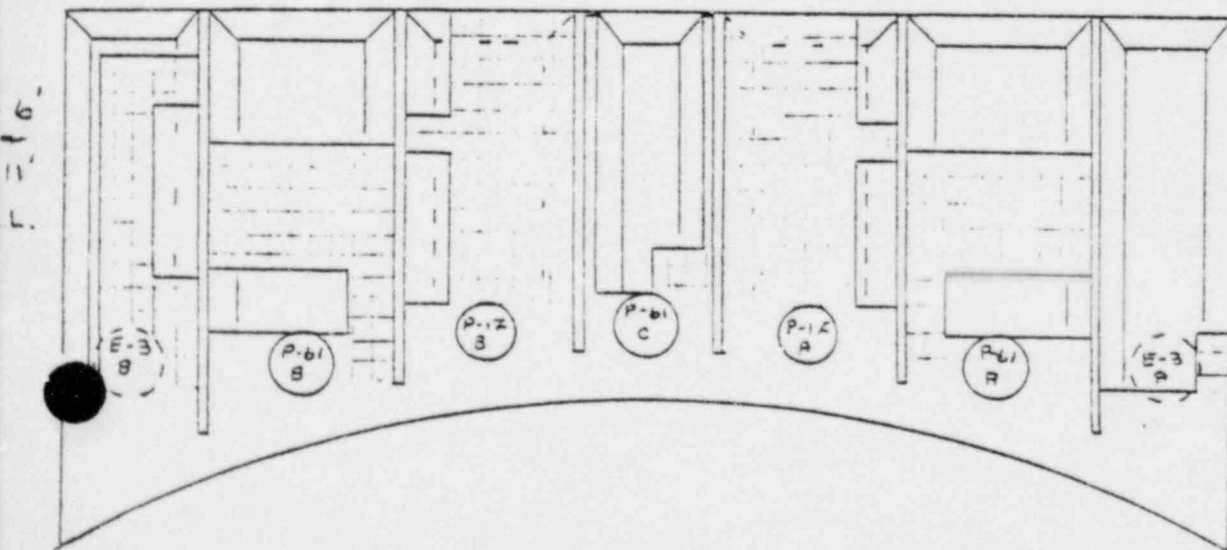
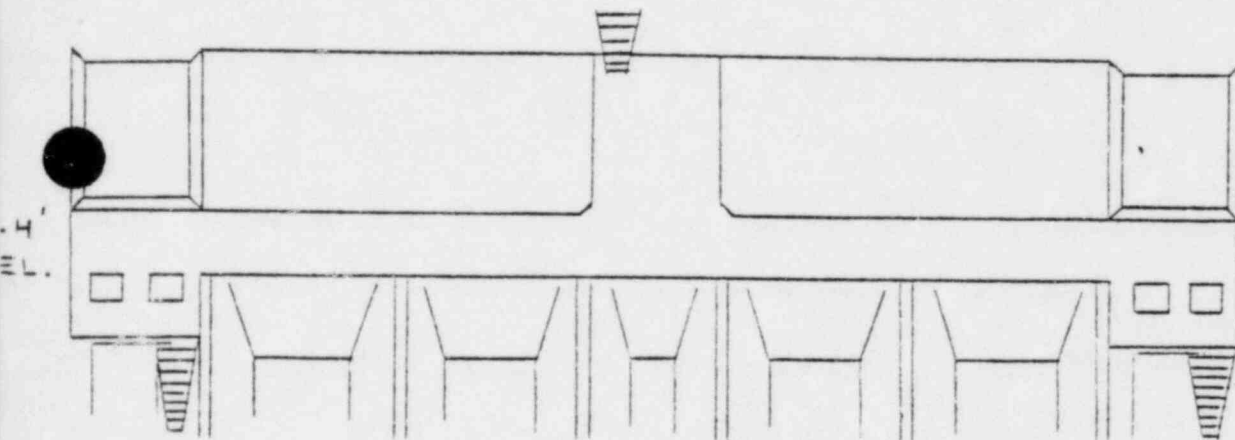
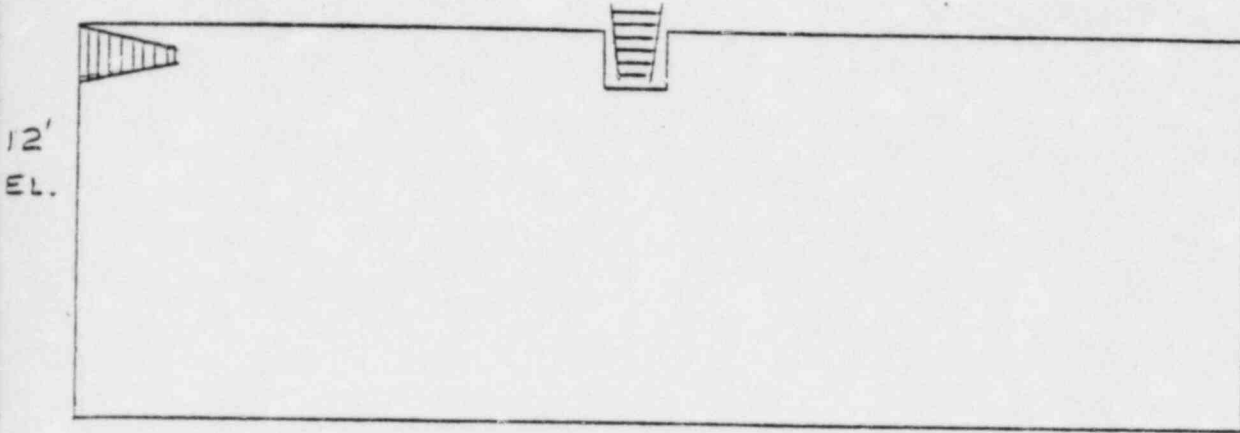
INST _____ SURVEY INST & NO _____ DATE _____
EFF. _____ TIME _____
BKG _____ TECH _____



MAINE YANKEE ATOMIC POWER CO. SPRAY BUILDING ROUTINE SURVEY

PAGE 2

INST _____ SURVEY INST & NO _____ DATE _____
 EFF. _____ TIME _____
 BKG _____ TECH _____



MAINE YANKEE ATOMIC POWER CO.

TURB. BUILDING EL. 61'-0" SURVEY
FORM

DATE _____
TIME _____
TECH. _____

SCALE/INCH _____

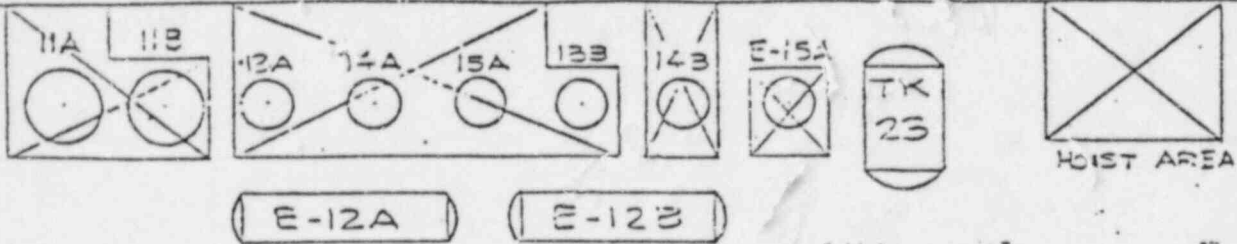
MODEL L _____

EFFICIENCY _____

BKG. _____

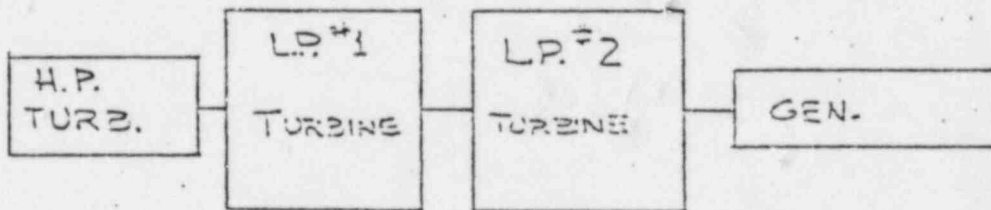
AREA OR ITEM TURB BUILDING EL. 61'-0"

NOTE: ALL READINGS TO BE IN MSR/HR OR dpm/100cm²



MSR-18A

MSR-B



MSR-C

MSR-D



FAST WALL TEMP. BLDG.

MAINE YANKEE ATOMIC POWER CO.

TURBINE BLDG- EL. 39'-0" SURVEY FORM

DATE _____

TIME _____

SCALES/INST. _____

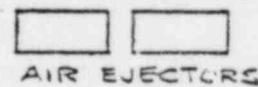
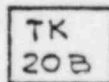
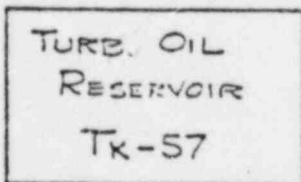
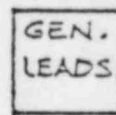
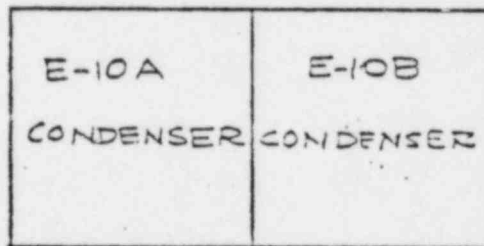
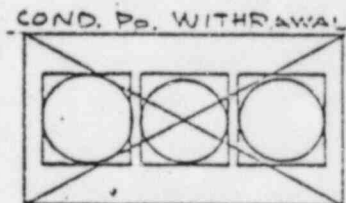
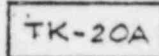
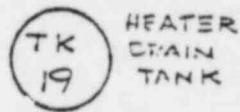
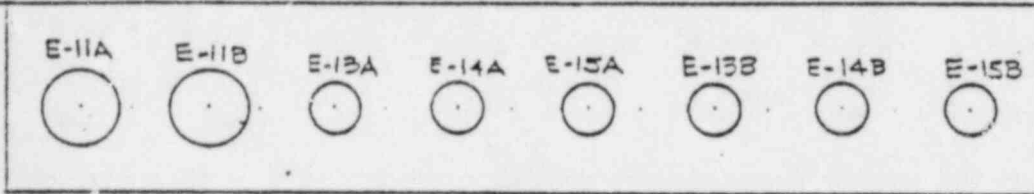
MODEL _____

AREA OR ITEM _____

EFFICIENCY _____

BKG. _____

NOTE: ALL READINGS TO BE IN MR/HR. OR dpm/100 cm²



HOIST AREA

MAINE YANKEE ATOMIC POWER CO.

TURB. BLDG-EL. 21'-0" SUREY FORM

DATE _____

TIME _____

SCALES/INST. _____

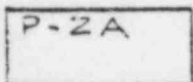
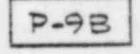
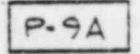
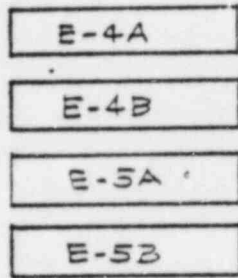
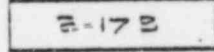
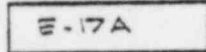
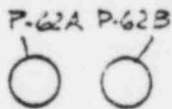
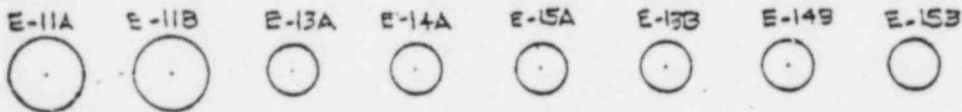
MODEL _____

AREA OR ITEM _____

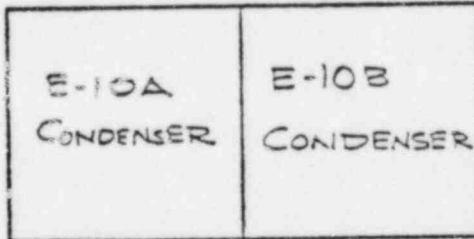
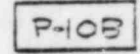
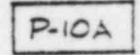
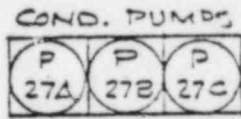
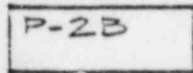
EFFICIENCY _____

BKG. _____

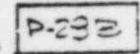
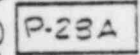
NOTE: ALL READINGS TO BE IN MR/HR. OR dpm/100 cm²



T.M. GEN.
F.D. PUMPS



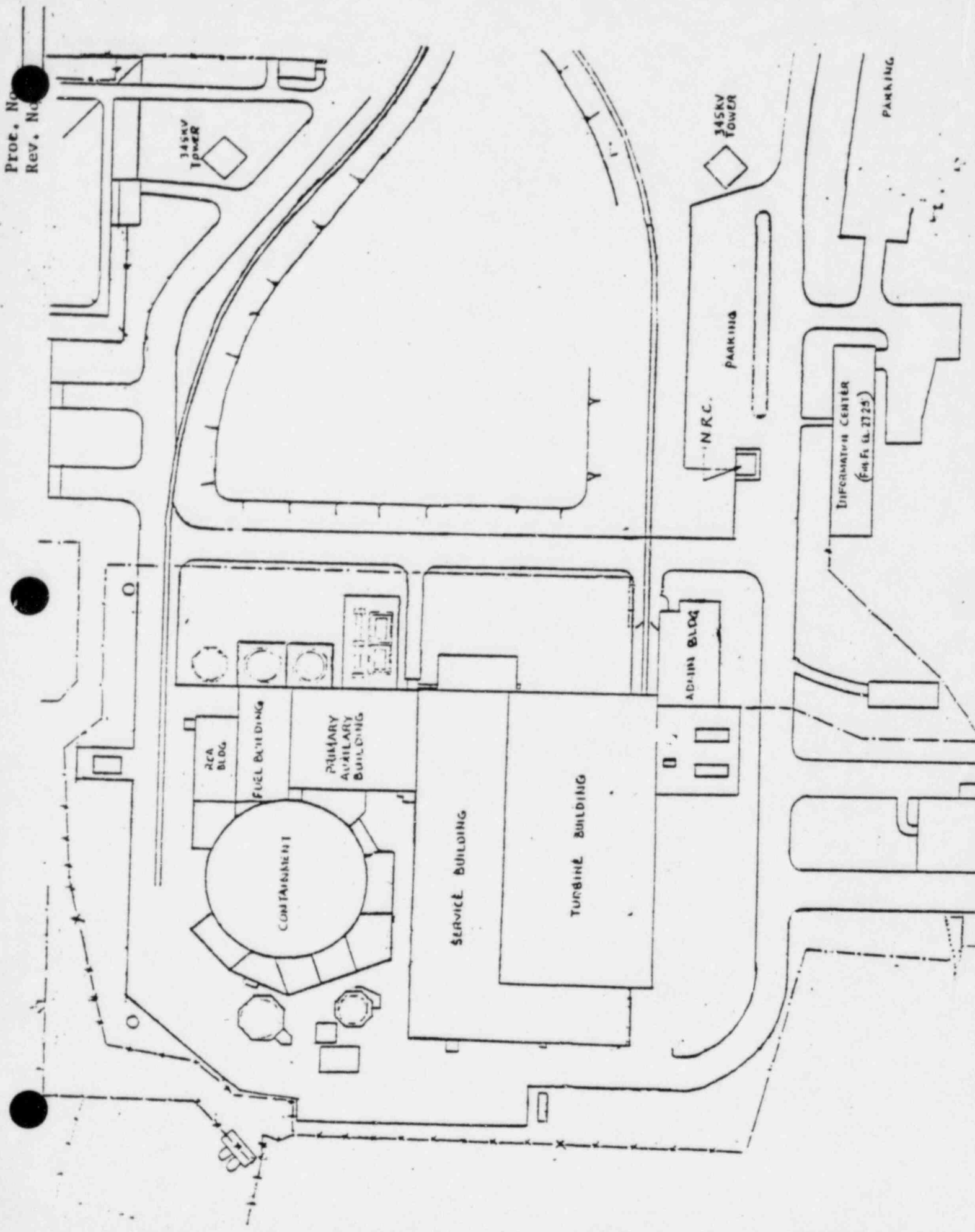
VAC. PRIM. Pp



EAST WALL TURB. BLDG.

NORTH WALL TURB. BLDG.

Proc. No.
Rev. No.



RADIATION SURVEY - FUEL BUILDING - 1ST & 2ND LEVELS

COUNTER _____

DATE _____

SURVEY INST. & NO. _____

TIME _____

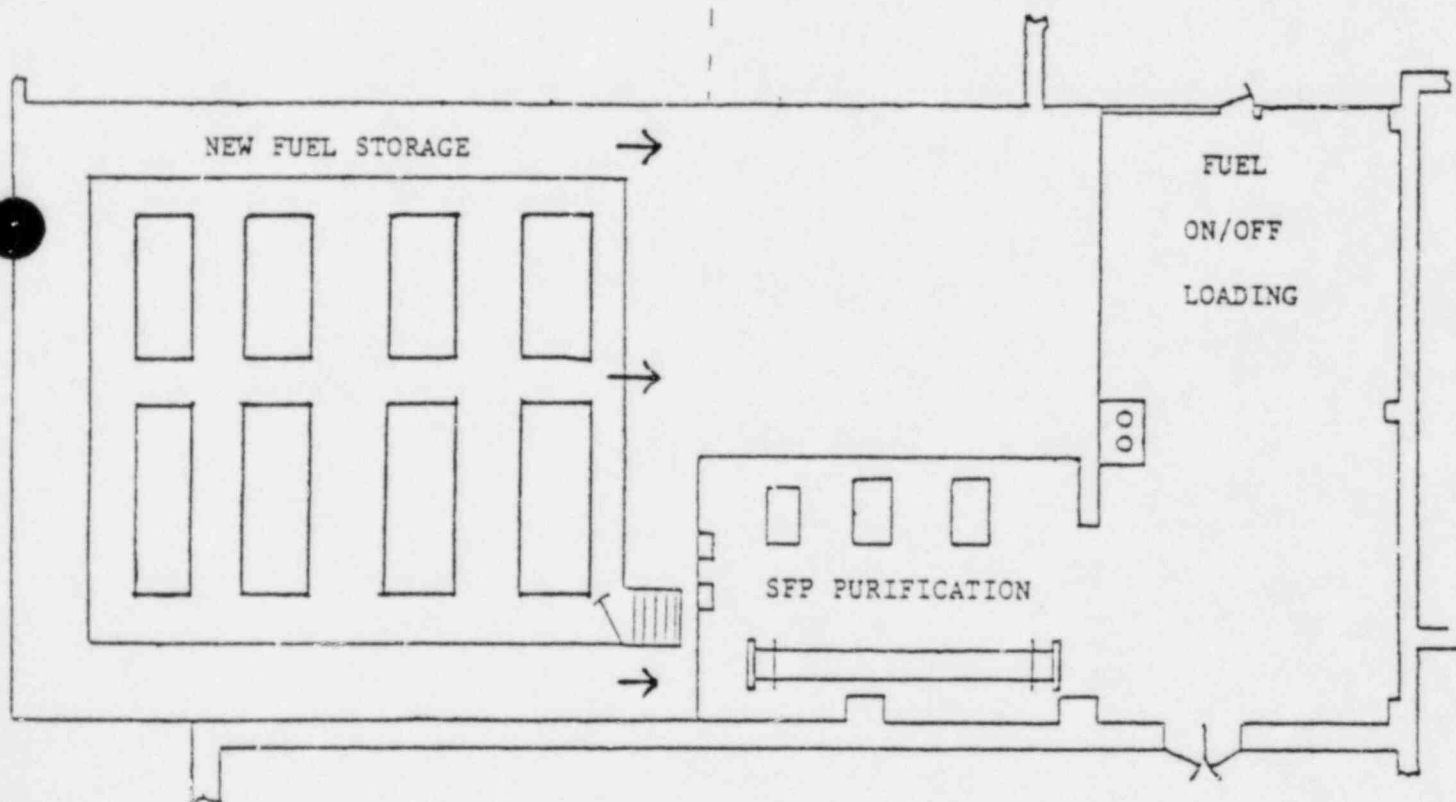
EFFICIENCY _____

TECH. _____

BKG. _____

2ND LEVEL

1ST LEVEL



NOTE: (1) Dose Rate Readings Indicate MREM/MRAT Waist Level Unless Otherwise Specified.

(2) Contamination Survey Reported in DPM/100 CM² Units - Indicate Location & Activity with Circled Reading.

RADIATION SURVEY - FUEL BUILDING - UPPER LEVEL

COUNTER _____

DATE _____

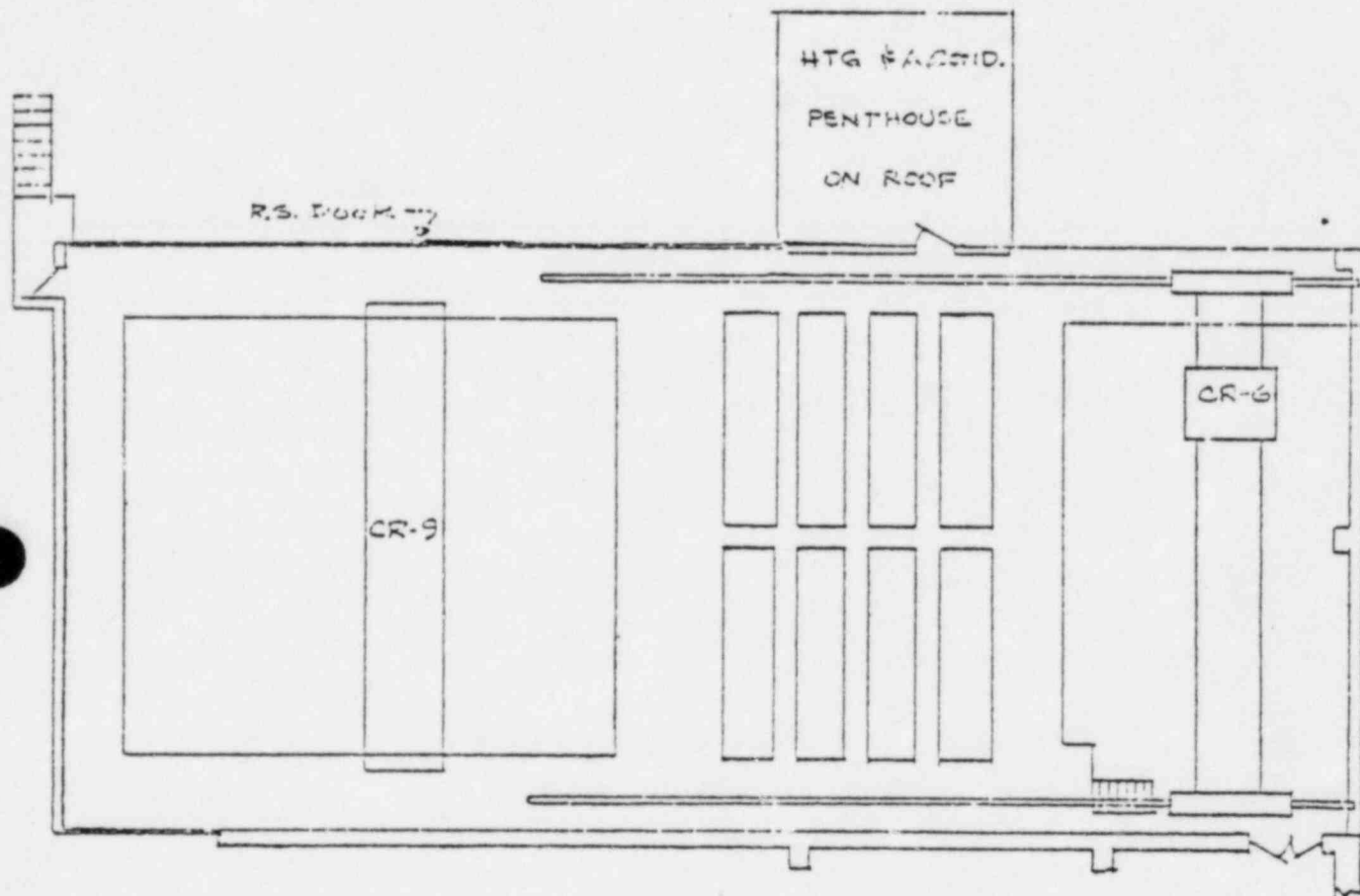
SURVEY INST. & NO. _____

TIME _____

EFFICIENCY _____

TECH _____

BKG. _____



NOTE: (1) DOSE RATE READINGS INDICATE MREM/HR AT WAIST LEVEL UNLESS OTHERWISE SPECIFIED

(2) CONTAMINATION SURVEY REPORTED IN DPM/100 CM² UNITS—INDICATE LOCATION & ACTIVITY WITH CIRCLED READING.

MAINE YANKEE ATOMIC POWER COMPANY
RIA STORAGE SURVEY FORM

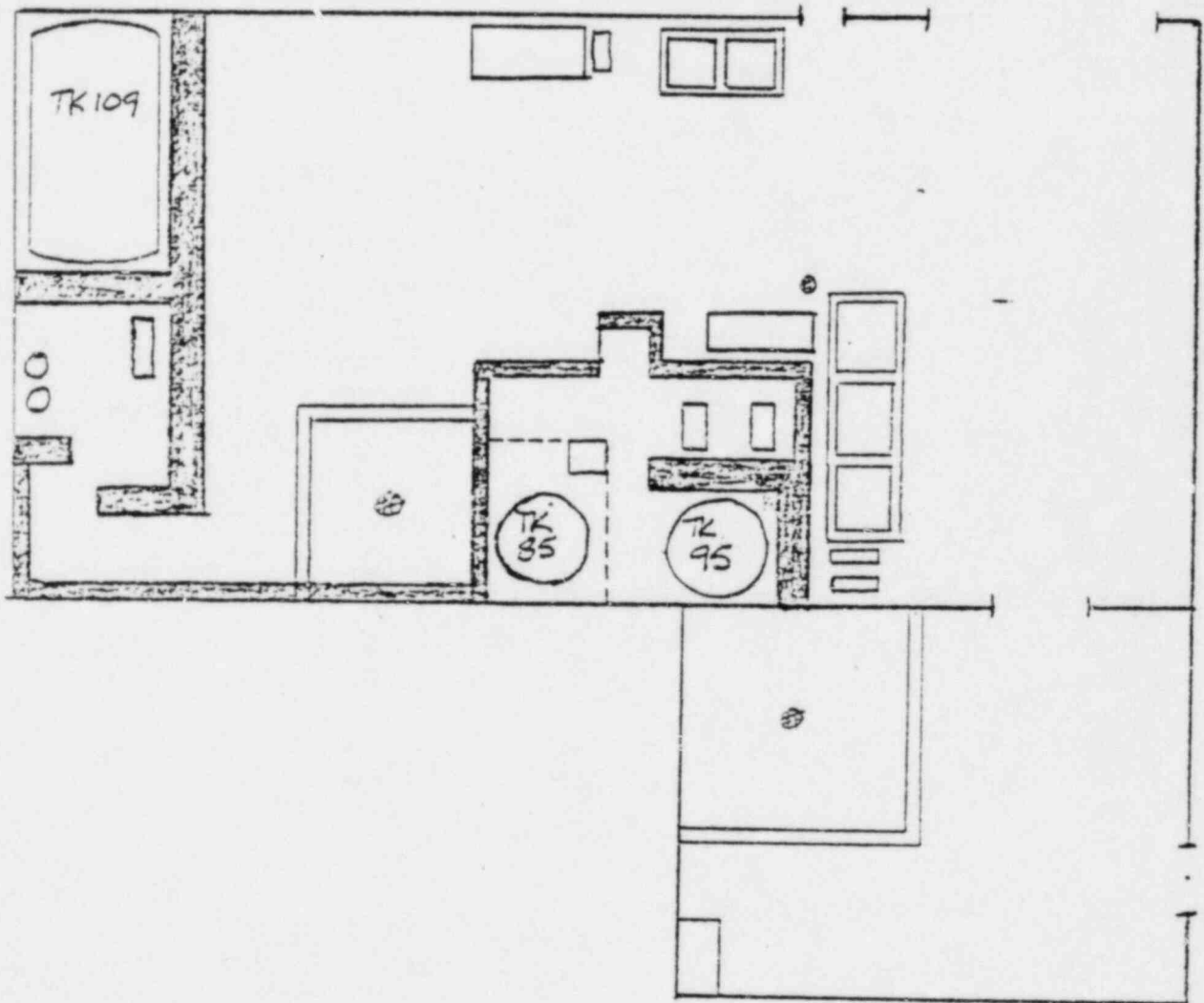
Counter _____ Inst. Type & No. _____ Date _____

Eff. _____ Time _____

Bkg. _____ Tech. _____

NOTE: All Dose Rate readings in MR/HR.
All Contamination readings are circled in DPM/100cm².

Area/Item _____



MAINE YANKEE ATOMIC POWER COMPANY

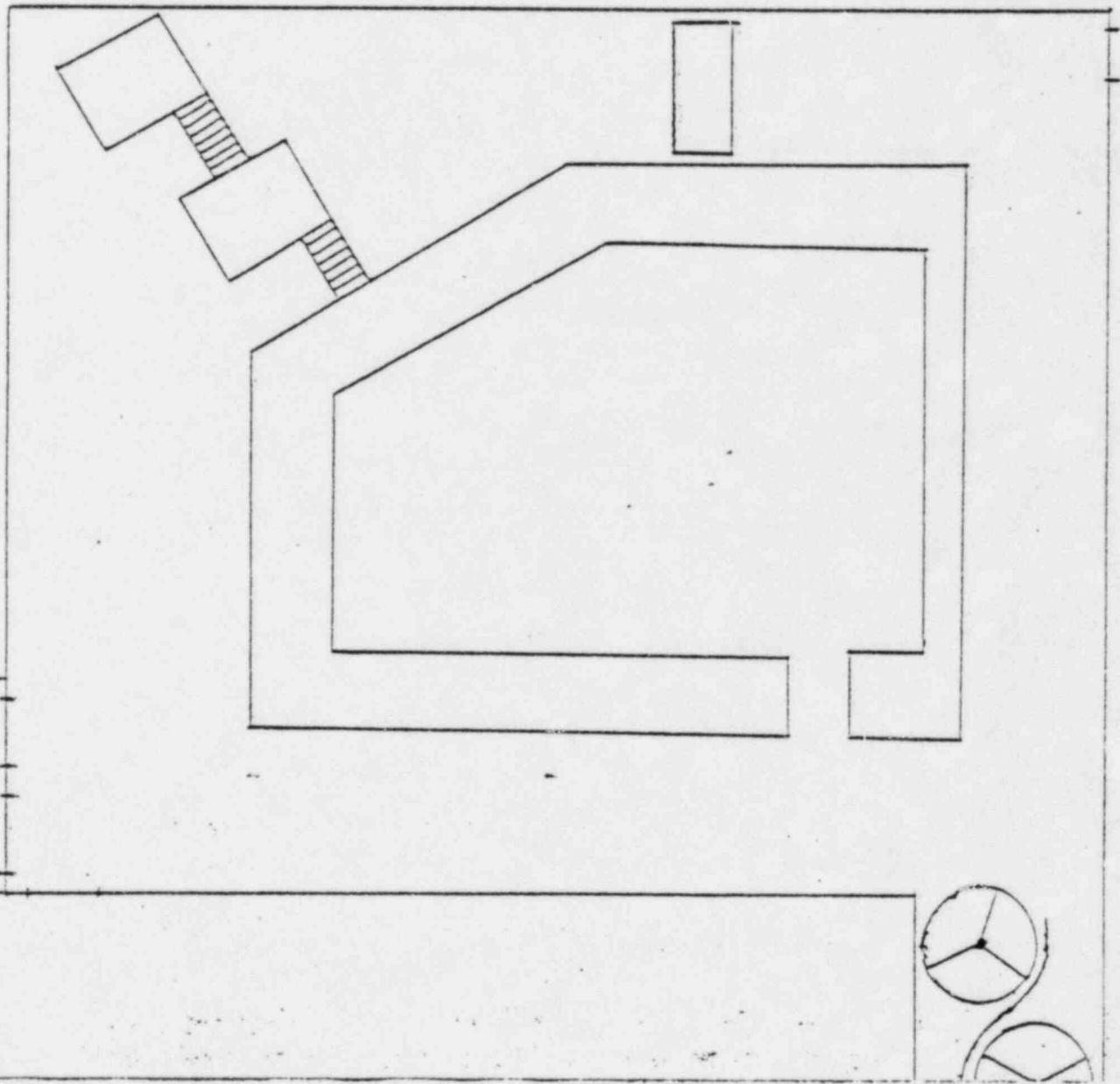
Counter _____ Inst. Type & No. _____ Date _____

Eff. _____ Time _____

Bkg. _____ Tech. _____

NOTE: All Dose Rate readings in MR/HR.
All Contamination readings are circled in DPM/100cm².

Area/Item: Gate House Weekly



MY-HP-94-77

MAINE YANKEE ATOMIC POWER COMPANY

NEW OFFICE BUILDING

DATE _____

TIME _____

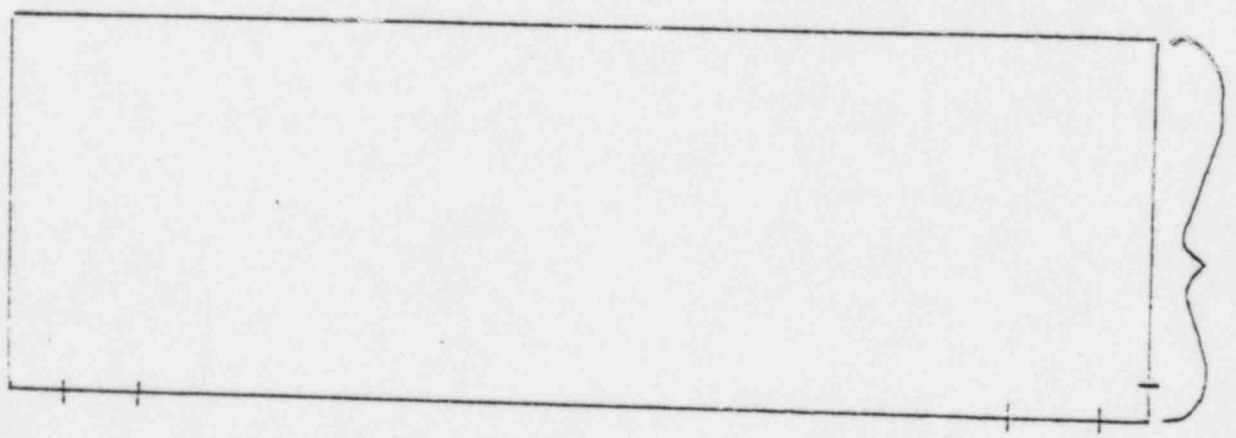
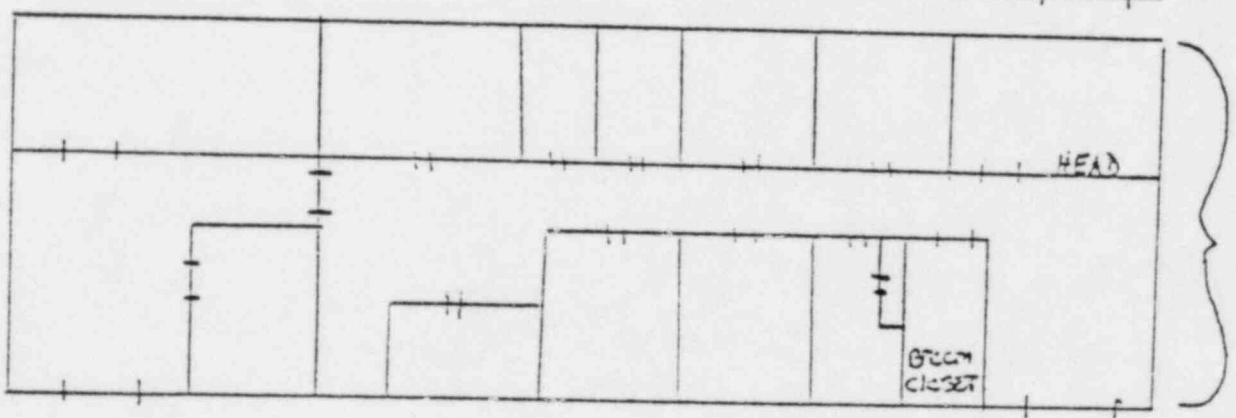
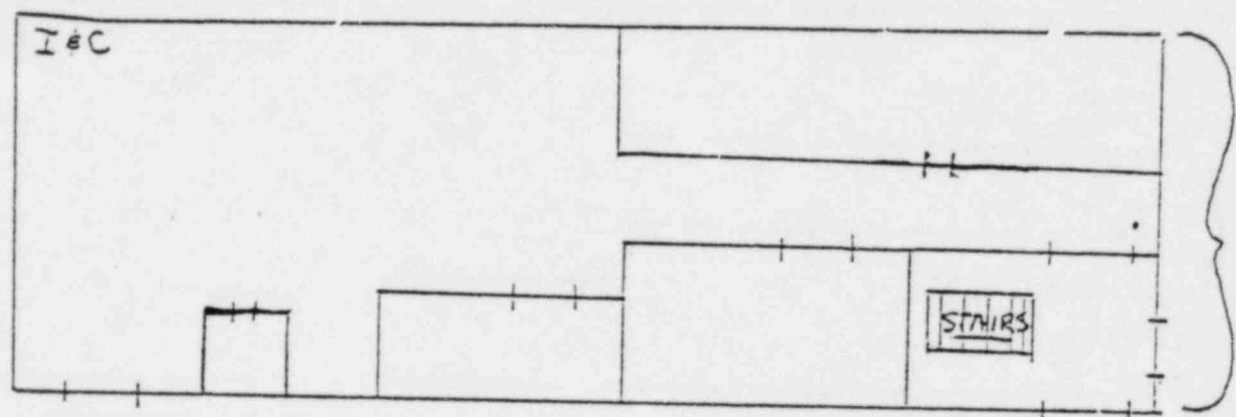
Scales/Inst. _____

Model _____

Efficiency _____

Bkg. _____

NOTE: All readings to be in MR/HR or dpm/100cm²



MY:WP:57-75 Rev. 1

MAINE YANKEE ATOMIC POWER COMPANY

ADMINISTRATION BUILDING SURVEY FORM

DATE _____

TIME _____

Scales/Inst. _____

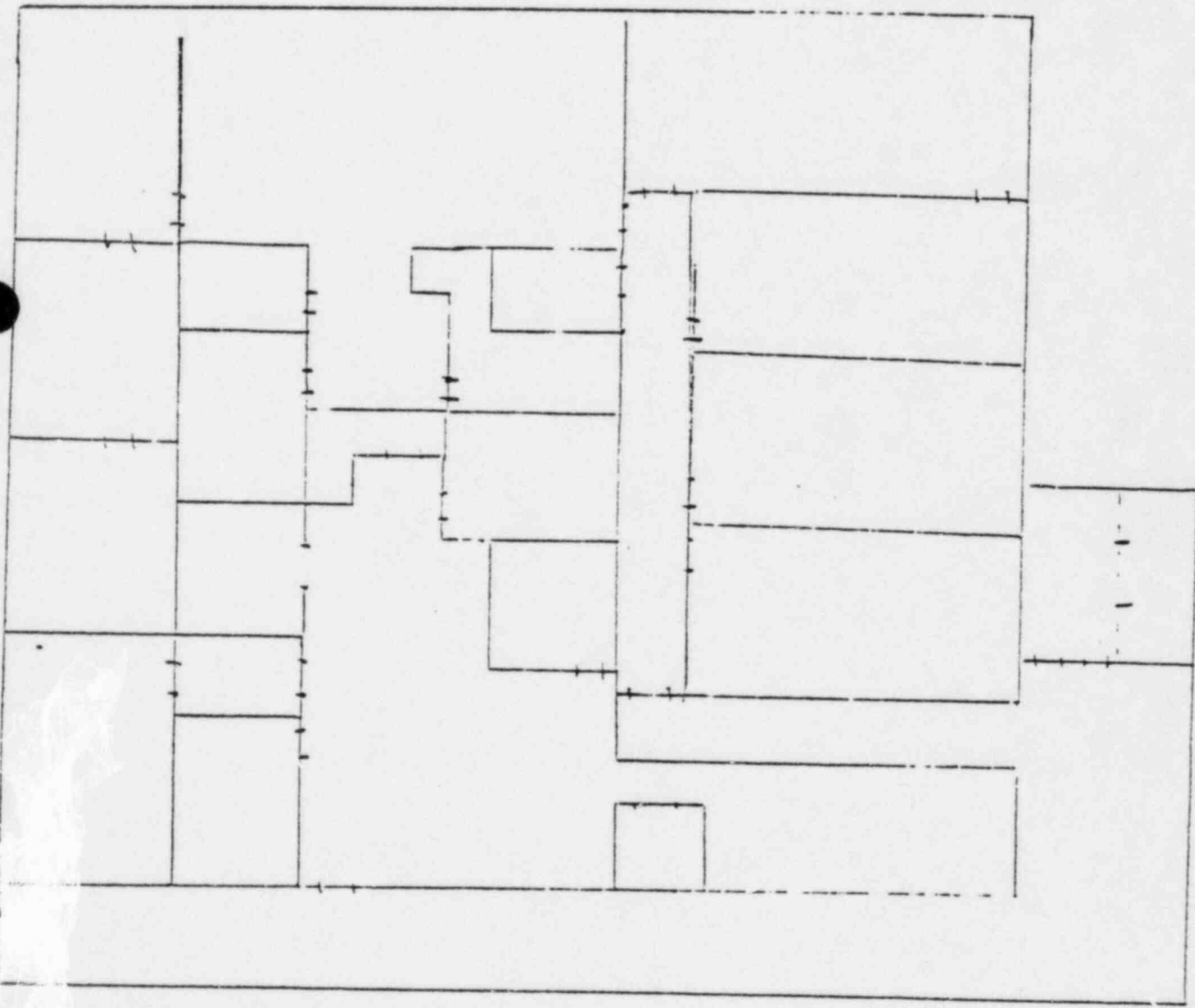
Model _____

Area or Item ADMINISTRATION BLDG.

Efficiency _____

Bkg. _____

NOTE: All readings to be in MR/HR or dpm/100cm²



MAINE YANKEE ATOMIC POWER COMPANY

CONTROL ROOM SURVEY FORM

COUNTER _____

SURVEY INST. & NO. _____

Efficiency _____

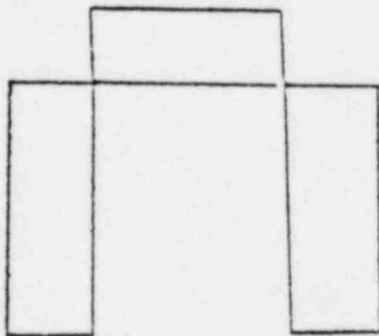
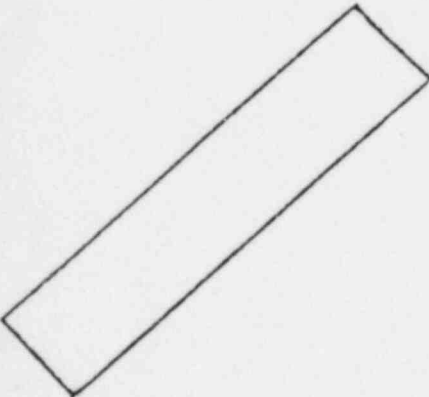
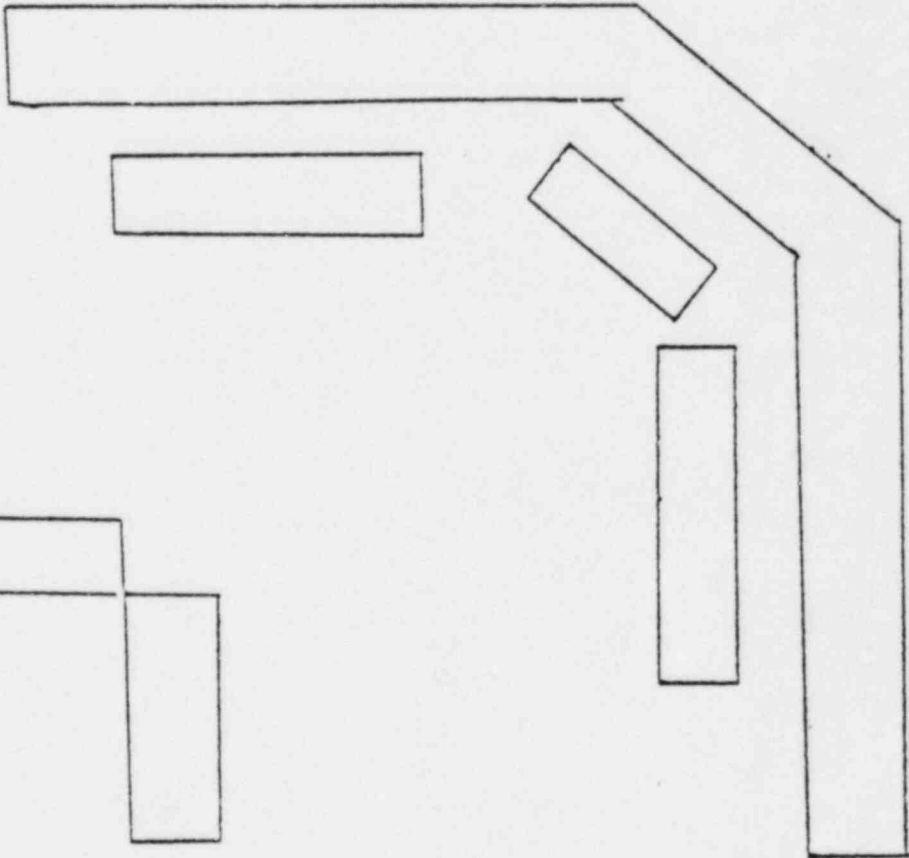
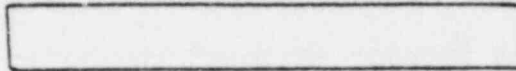
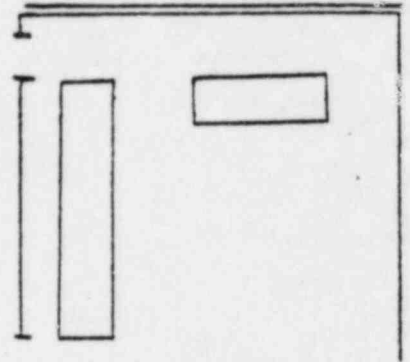
Bkg. _____

NOTE: All readings to be in MR/HR or dpm/100cm²

DATE _____

TIME _____

TECH. _____



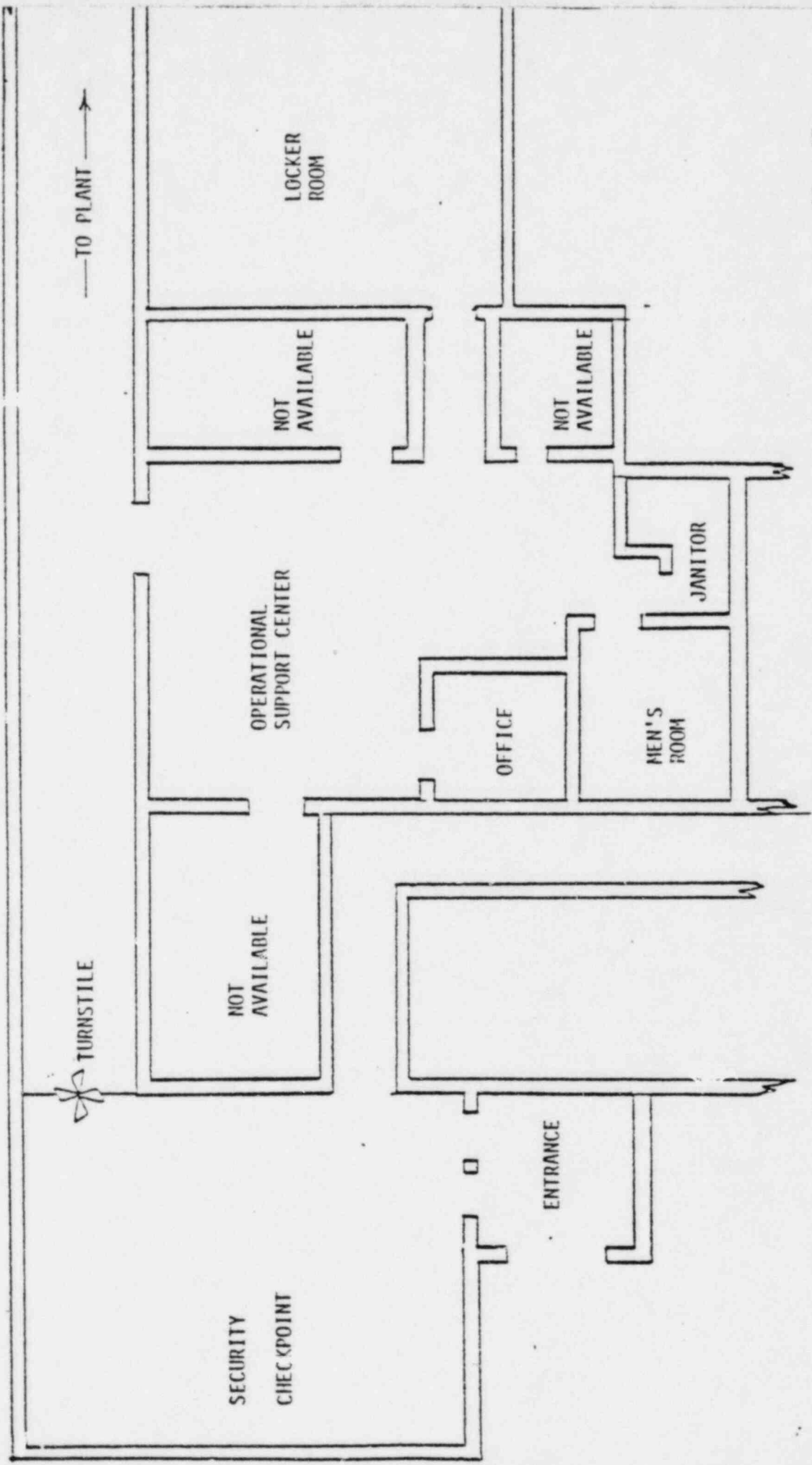
0

PROC. No. 2.50.7
" 3V. No. 2

0

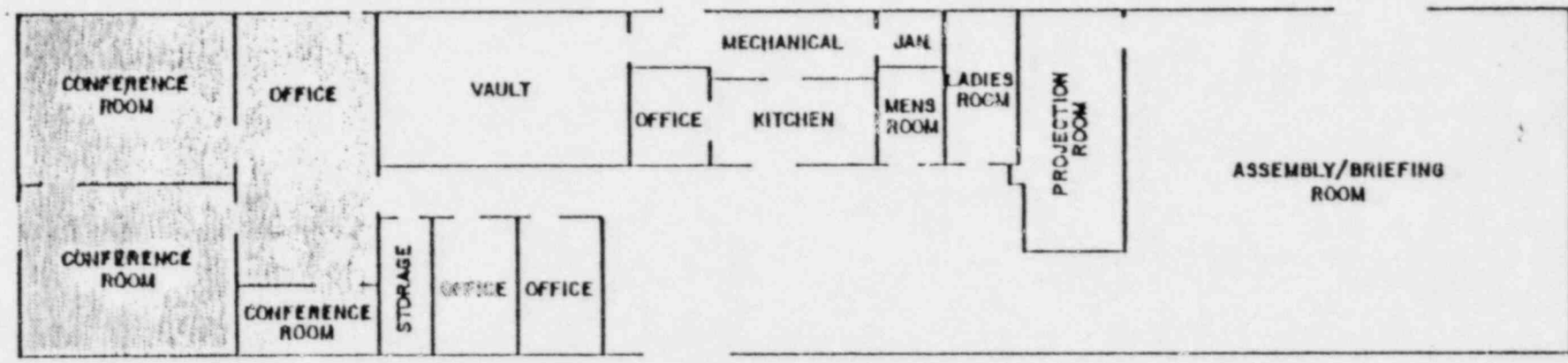
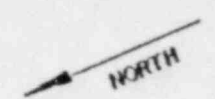
-24-

FIGURE 7-5. OPERATIONAL SUPPORT CENTER AND SECURITY CHECKPOINT



FEET

12-31-80



EOF (SHADED AREA)

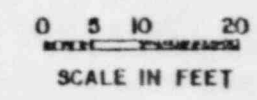


FIGURE 7-3
PRIMARY EMERGENCY OPERATIONS FACILITY
(Information Building)